

**PREVIEW:** More of Leopard Revealed p. 18

# Macworld

www.macworld.com | August 2007

The Mac Experts

## 63 Great Mac Downloads

**Low-Cost  
Programs  
You're  
Going to  
Love!**



**Google Takes  
On Office**

Word Processor,  
Spreadsheet, and  
More—for Free

\$6.99 U.S./\$7.99 CANADA





Monticello Raceway, photographed by Bill Frakes





**Aperture Profile: Bill Frakes,  
Sports Illustrated Photographer, Monticello, New York**  
*Each October for the last 10 years, Bill has journeyed to Monticello Raceway to shoot the imagery associated with harness racing. Using Aperture, Bill customizes the way he stores his images, tags them and can access them within seconds. From home, the track or anywhere in the world.*



## After 25 years of shooting, Bill Frakes needs more than a good memory to find his photos.

Bill Frakes has shot millions of images over his career. His life's work is his most valuable asset. Decades of *Sports Illustrated* cover shots, over 20 Kentucky Derbies, photos from the Tour de France and the more than 10,000 shots he's taken at Monticello Raceway – they're all important to him. Which is why he's moving his entire library over to Aperture.<sup>™</sup>

With his digital work already moved over and his film work well on its way, Bill is trusting his storied past and busy future to Aperture's comprehensive photo management tools. Now, for the first time in his career, all his photos will be in one place, where he'll be able to tag them, store them in whatever way he sees fit and locate them with just a few keystrokes. Bill's livelihood depends on being able to find specific images for clients, and with Aperture they'll be safer, more secure and more easily accessible than ever before.

Aperture allows you to manage, compare, adjust and archive photos in a whole new way, which is something any photographer can appreciate. Whether you've been shooting for several months, or several decades.

Learn more about Aperture 1.5 and download a free trial at [apple.com/aperture](http://apple.com/aperture)



smart phone.

really smart phone.



**The smartest way to protect the world's most revolutionary phone.**

PREMIUM LEATHER

IMPACT RESISTANT SHELL

FULL FACE SCREEN PROTECTION

**case-mate**

Available at select AT&T stores nationwide, or visit [www.case-mate.com](http://www.case-mate.com)





# The *A* List

High-Tech Gear for Back to School

## iPod



Protect with rich leather

## Shuffle



Wrap it in Italian Pebblestone Leather

## Clip



Clip it to almost anything

## Ear Armour



Carry your earbuds anywhere

## Suit



Dress up your Macbook Pro

## Sleeve



Slip on Italian Pebblestone Leather

## Handle-it



Carry your laptop in style

## Glovez



Slide into cool and modern neoprene

**ups** **FREE UPS**  
Ground Shipping  
For 48 Contiguous US States

**case-mate**

Call Us Toll Free at: 1-866-689-3432

[www.case-mate.com](http://www.case-mate.com)



# MacMall

The #1 Apple Direct Reseller!



**FREE HP C3180 All-in-One  
Printer after rebates!**  
With CPU purchase. See below.

## MacMall Has the Best Deals on Apple® Computers!

Call MacMall and learn how to integrate your iPod® and your computer with your widescreen plasma or LCD TV!

### NEW! Apple MacBook Pro Now up to 2.4GHz!

NEW speeds! NEW graphics! NEW display options! The revamped MacBook™ Pro gives you more power than ever before so you can hit the road with everything you need to be fully productive wherever you go!

- NEW! Intel Core 2 Duo speeds up to 2.4GHz
- NEW! NVIDIA professional video graphics
- NEW! 15" model with LED-backlit display
- NEW! 17" model with optional 1920 x 1200
- Built-in iSight™, wireless & Gigabit Ethernet

Now Faster!  
NEW 15" LED!  
NEW Graphics!

starting at \$1994  
(mail-in rebate) - \$150

MacBook Pro  
starting at **\$1884!**

### iMac®

Get up to \$100 cash back!  
Parallels Desktop for Mac only \$99!  
With iMac purchase. After  
mail-in rebates. While supplies last!  
Call for details.

starting at \$994  
(mail-in rebate) - \$75  
**\$919!**

### Mac® mini

Get \$20 cash back!  
Parallels Desktop for Mac only \$99!  
With Mac mini purchase. After  
mail-in rebates. While supplies last!  
Call for details.

starting at \$594  
(mail-in rebate) - \$20  
**\$574!**

### NEW Adobe Creative Suite 3!

Upgrades from \$393<sup>99</sup>!  
**NEW Photoshop CS3 and  
Photoshop CS3 Extended!**  
Upgrades from \$195<sup>99</sup>!  
**NEW Illustrator CS3!**  
Upgrades from \$195<sup>99</sup>!  
**NEW Master  
Collection CS3!**  
only \$2499<sup>99</sup>!



For complete details on  
these new suites, visit  
[www.macmall.com/adobe/](http://www.macmall.com/adobe/)

## NEW! Faster speeds for your busy digital life!

Because Apple knows that the speed of your modern life keeps accelerating, they just made the NEW MacBook™ even faster so it can keep pace with your demands for productivity and your need to kick back and have some fun anywhere you travel!

- NEW! Intel Core 2 Duo speeds up to 2.16GHz
- 13.3" glossy widescreen display (1280 x 800)

starting at \$1094  
(mail-in rebate) - \$75

MacBook  
starting at **\$1019!**

- AirPort® Extreme Wi-Fi based on 802.11n
- Built-in iSight™ and Gigabit Ethernet



\*REBATE-Purchase an iMac, MacBook, Mac Pro, MacBook Pro or Mac mini and receive up to \$200 cash back via MacMall mail-in rebate. Ends 7/8/07. ■ PARALLELS DESKTOP OFFER-Get Parallels Desktop for Mac (#7080016) for only \$9.99 after \$10 mfr. and \$60 MacMall mail-in rebates with purchase of any new Intel-based Apple CPU. Price before rebates is \$79.99. Ends 7/8/07. ■ FREE HP PRINTER OFFER-Get an HP PhotoSmart C3180 All-in-One FREE after \$20 MacMall instant rebate and after \$29.99 MacMall mail-in and \$50 mfr. mail-in rebates with purchase of any Apple computer. Price before rebates is \$99.99. Ends 7/8/07. ■ CARRYING CASE OFFER-Get a carrying case for only \$9.99 after \$20 mfr. mail-in rebate with purchase of any MacBook or MacBook Pro. Price before rebate is \$29.99. Ends 7/8/07. ■ ALL OFFERS VALID WHILE SUPPLIES LAST. For rebate terms and conditions, please visit our Web site and enter the applicable part number. Download rebate coupons at [www.macmall.com/rebates](http://www.macmall.com/rebates).

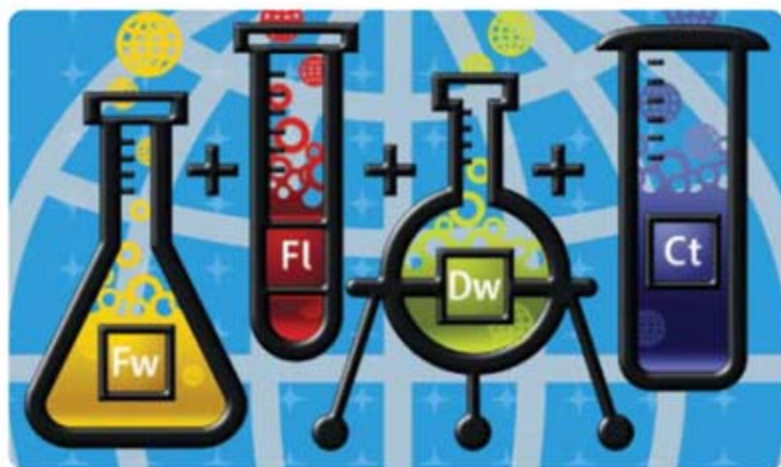
1-800-321-7532 | [www.macmall.com](http://www.macmall.com)

SOURCE CODE: MACWORLD



## CONTENTS

August 2007



34



40



On the  
Cover

### OPINION

#### 9 From the Editor's Desk

They came to hear about Leopard. But all they could talk about was the iPhone.

#### 16 Feedback

Readers respond.

### MAC BEAT

#### 18 More of Leopard Revealed

Highlights include a redesigned Finder and an updated desktop.

#### 19 Apple Brings Safari to Windows

Version 3 improves tabbed browsing and becomes cross-platform.

#### 20 Developers Get Some iPhone Access

Apple will let third parties write Web 2.0 applications.

#### 32 Hot Stuff

Check out the cool products we're into right now.

### REVIEWS

#### 34 Online Design

Adobe's new CS3 package is so big that we're reviewing it in stages. This month, we examine Adobe's Web design programs and find out what is new and noteworthy.

#### 40 MacBook Trades Up

Apple's MacBooks celebrate their one-year anniversary with a newer Intel chip, more RAM, and larger hard drives. Are they bigger and better? We test them and see.

#### 42 macworld.com/reviews

We're constantly reviewing the latest Mac hardware and software on [Macworld.com](http://Macworld.com). Here are quick summaries of this month's online exclusives.

#### 44 Top Products

Looking for a new printer, monitor, digital camera, or other hardware? Check out our current favorites, as well as a complete listing of all current Macs and iPods.



**COVER STORY**

**46** **Software Treats**

Looking for some good low-cost software? Look no further. We've scoured the Web and come up with 63 gems that won't cost you an arm and a leg.

**FEATURE**

**60** **The Google Office**

From word processing to formula-crunching spreadsheets, Google's suite of free, online programs can do it all. But can it really replace your copy of Microsoft Office?

**SECRETS**

**70** **Working Mac**

Whether you're feeling forgetful or your Keychain has just gone kaput, here's how to fix six common password problems.

**74** **Playlist**

Learn how to convert your own audiobook CDs into files that will play properly on your iPod.

**78** **Digital Photo**

Tap into the image-stabilization technology in many digital cameras to prevent blurry photos.

**82** **Geek Factor**

Want to mount a Windows server, display useful information on your desktop, or peek inside an installer package? These tools can help.

**HELP DESK**

**84** **Mac OS X Hints**

Borrow a drive from another Mac, speed up iPhoto image burning, use Preview to create image files, and more.

**88** **Mac 911**

Fix missing system icons, export AIFF podcasts in GarageBand, physically transport a file in a pinch, and more.

**BACK PAGE**

**112** **Spotlight**

Is the thought of Apple without Steve Jobs unfathomable? John Siracusa doesn't think so.



**MACWORLD.COM'S TOP 5**

The top 5 stories on Macworld.com are:

**1** **Contest Winner: Vista More Secure Than Mac OS**

The security researcher who uncovered a QuickTime flaw offers some advice for Mac users ([macworld.com/2822](http://macworld.com/2822)).

**2** **Apple Updates MacBook with Faster Processors**

Apple has updated its consumer laptops—faster processors, 1GB of RAM, and larger hard drives ([macworld.com/2823](http://macworld.com/2823)).

**3** **How to Make Tiger Roar Like a Leopard**

Computerworld's Ryan Faas has suggestions for using open-source, shareware, and commercial programs to speed up your OS ([macworld.com/2824](http://macworld.com/2824)).

**4** **Jobs Addresses Backdating, Environment at Shareholder Meeting**

At Apple's annual shareholders meeting, Steve Jobs addressed backdating stock-option scandals, Greenpeace, the iPhone, and the delay of Leopard ([macworld.com/2825](http://macworld.com/2825)).

**5** **MacUser—Breaking Down 52 Ways to Speed Up Your Mac**

Derik DeLong looks at various ways to speed up your Mac and determines whether they actually have an effect on performance ([macworld.com/2826](http://macworld.com/2826)).

(Ranking valid as of May 23, 2007)





**Go from tweak, proof, tweak, proof,  
tweak, proof, to tweakproof.**

# huey<sup>™</sup> PRO

ADVANCED COLOR CORRECTION

The most award-winning family just got better. **huey<sup>™</sup>**, winner of nine industry awards, combines the latest technologies in monitor color correction with easy-to-use features and a ground-breaking price. Now the **huey** family welcomes its newest member - **hueyPRO** - a multiple-monitor calibrator with the **\*industry's only ambient light sensor and more**. **huey** and **hueyPRO**, what you need to take your digital darkroom to the next level. For more information, visit [pantone.com/colorcontrol](http://pantone.com/colorcontrol).



Available at:



Office DEPOT



The color of ideas.™



# Eliminate paper. Liberate your cool.

photo: razzi-la.com



SCAN

## Fujitsu ScanSnap. It's a snap.

Why push paper when you can push a button? Free yourself with the new ScanSnap S500M scanner, the most powerful solution in its class for turning paper into electronic documents. Since the Fujitsu ScanSnap comes preloaded with Adobe® Acrobat® 7.0 Standard (a \$299 value), one touch of a button is all it takes to turn double-sided documents into PDFs, ideal for storing, protecting and sharing documents. And you'll be doing it fast. Native support for the new Intel® chipset delivers a blazing 18 pages per minute scan speed. All this and it's small enough to fit where your inbox used to be. So get rid of paper and get back your cool with the Fujitsu ScanSnap. It's a snap! Visit us at <http://us.fujitsu.com/scanners/96AA> for more information.

Free I.R.I.S. card scanning and OCR software\*



ScanSnap S500M  
**\$495** MSRP

# FUJITSU

THE POSSIBILITIES ARE INFINITE



© 2007 Fujitsu Computer Products of America, Inc. All rights reserved. Fujitsu and the Fujitsu logo are registered trademarks of Fujitsu Ltd. Adobe and Acrobat are registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries. Cardiris, Readiris and the I.R.I.S. logo are I.R.I.S. trademarks. All other trademarks are the property of their respective owners. I.R.I.S. software promotion is available through downloadable mail-in rebate form and is retroactive to October 1, 2006.



# In the Shadow of the iPhone

At WWDC, Leopard loses the spotlight

**E**ighteen days. The number hung over the auditorium like fog on a gray San Francisco day. Although Steve Jobs spent most of his keynote address at June's Worldwide Developers Conference (WWDC) discussing the next version of Mac OS X (Leopard), the impending release of the iPhone, which is set for June 29, colored every aspect of the presentation.

It didn't help that Jobs introduced Leopard at last year's WWDC, making large parts of this year's presentation feel like an old-fashioned summer TV rerun. Originally, the idea was that Leopard would be released by this year's conference. But Apple's mad rush to ready the iPhone for its date with destiny meant that Leopard would have to wait until October.

## Hints of Leopard

Yes, Jobs did unveil some new features in Leopard, features that could make this the biggest overhaul of the Mac OS X interface since that operating system was first launched.

Cover Flow, a clever iTunes add-on that Apple purchased from programmer Jonathan del Strother, is now built into iTunes. It's also going to be one of four standard view options in the new Leopard edition of the Finder.

Apple appears to have settled on a single window style—the one you'll find now in iTunes 7—and that choice alone will provide some delightful consistency to the Mac interface. The addition of Stacks to the Dock could make the Dock a pivotal part of the Mac interface, rather than a minor tool for launching and switching applications. Throw in a few of the previously announced features, especially Spaces, the multiworkspace utility, and Leopard could indeed enable a major improvement in Mac OS X productivity—albeit after a bit of a learning curve.

Jobs spent some time discussing



## The few tidbits about Leopard weren't the hot topic after Jobs's keynote address.

Boot Camp, mostly to emphasize what it wasn't: a Parallels Desktop and VMWare Fusion killer. Those two programs let you run Windows and Mac OS side-by-side (instead of rebooting into a Windows session). There had been some talk that the next version of Boot Camp would offer the same feature. But Jobs gave Parallels and VMWare a big verbal hug, calling Boot Camp "a great complement" to those programs. (For more details on Jobs's Leopard preview, see "More of Leopard Revealed," page 18.)

## Counting Down

As nice as it was to get those few tidbits about Leopard, what people were really talking about in the halls after Jobs's address was the device that will be released exactly 18 days after the keynote: the iPhone.

Ever since the iPhone was announced at last January's Macworld Expo, the people who write software for the Mac have wondered: Will we be able to write software that runs on the iPhone, too?

Apple's answer has evolved over time. In January, it appeared to be no. By early May, the company was "wrestling" with the matter. By the end of May, Steve Jobs was suggesting that Apple would find a way to let developers write software for the iPhone.

At WWDC, Jobs said that would-be iPhone developers could write snazzy Web applications that would work on the phone's built-in Safari Web browser. That's not a bad idea—in fact, it's one that many developers would have suggested themselves if they had gotten the chance.

These days, Web-based software can be pretty sophisticated. We've even devoted a story in this issue to the remarkable new office suite offered by Google (see page 60). But as advanced as Web software has become, it's still not good enough for many tasks or for people who work without access to the Internet.

Apple's clearly been sprinting for six months just to get the iPhone ready for the world to see. And I have little doubt that, in a few months, the company will be ready to talk to developers about other ways of writing "real" software (not just Web applications) to run on its new baby. That's good news for potential iPhone users. Because as skilled as Apple's in-house programmers are, they won't ever be able to fulfill the needs of every iPhone user. That's where independent programmers could play a key role—just as they do on the Mac.

By the time you read this, the hype about the iPhone will have reached a crescendo. We plan on providing in-depth coverage of the iPhone in our next issue, but in the meantime I encourage you to visit [macworld.com/iphone](http://macworld.com/iphone) for the latest iPhone coverage from Macworld's expert writers. ☒

What do you think about the iPhone? Join the discussion at [macworld.com/forums](http://macworld.com/forums), or drop me a note at [jason\\_snell@macworld.com](mailto:jason_snell@macworld.com).



# We improved perfection.

When you need to simplify, identify, track or organize, the Smart Label Printer\* from Seiko Instruments is ideal.

Easily create custom labels with 1-D and 2-D bar coding, such as Codabar, UPC, EAN, Code 128, MaxiCode, PDF417 or Data Matrix using our bundled Smart Label software. Simply plug the SLP into your Mac\* and print labels quickly, as fast as one label per second, in clear, legible, machine-scannable 300 dpi. The SLP is hassle free with no ink, noise, or fuss thanks to our clean and quiet direct thermal printing.

Choose from three great SLP models and our expanding line of SmartLabels®. See all the Smart Label Printer products at [www.sii-businessproducts.com](http://www.sii-businessproducts.com) or our authorized resellers.

Buy.com • CDW • CompUSA  
Fry's Electronics • Micro Center



Mark or identify  
with SLP-35L  
or SLP-27210

Label packages  
with SLP-SRL  
or SLP-SRLC

**SII**

Seiko Instruments USA Inc.

© 2007 Seiko Instruments USA Inc. All rights reserved. "Smart Label Printer" is a registered trademark and "SmartLabels" is a trademark of Seiko Instruments USA Inc. "SII" and "SII" logo are registered trademarks of Seiko Instruments USA Inc. All other brands and trademarks are the property of their respective companies.

## Macworld

<b>VP, Editorial Director</b>	Jason Snell
<b>Executive Editor, Print</b>	Dan Miller
<b>Executive Editor, Online</b>	Philip Michaels
<b>Managing Editor, Print</b>	Sue Voelkel
<b>Managing Editor, Online</b>	Curt Poff
<b>Art Director</b>	Rob Schultz
<b>Macworld.com News Director</b>	Jim Dalrymple
<b>Senior Editor, Features</b>	Kelly Turner
<b>Senior Editor, How-to</b>	Scholle Sawyer McFarland
<b>Senior Editor, News</b>	Jonathan Seff
<b>Senior Editor, Reviews</b>	Jackie Dove
<b>Lab Director</b>	James Galbraith
<b>Senior Editors</b>	Christopher Breen, Peter Cohen, Dan Frakes, Rob Griffiths
<b>Senior Copy Editor</b>	Sally Zahner
<b>Associate Editor, Reviews</b>	Eric Suesz
<b>Assistant Editor</b>	Brian Chen
<b>Designer</b>	Carli Morgenstein
<b>Editor at Large</b>	Rick LePage
<b>Senior Contributors</b>	Adam C. Engst, Jim Heid, Ted Landau
<b>Contributing Editor</b>	Cathy Lu
<b>Contributing Lab Analyst</b>	Jerry Jung
<b>Contributing Copy Editors</b>	Gail Nelson-Bonebrake, Charles Purdy
<b>Production Consultant</b>	Jennifer Werner
<b>Contributing Photographer</b>	Peter Belanger

**Absent Friends:** John J. Anderson, Andrew Fluegelman, Bruce Fraser, Cary Lu, Charles Seiter, Derek Van Alstyne

### HOW TO CONTACT MACWORLD SUBSCRIPTION SERVICES

Access your subscription account online—24 hours a day, 7 days a week—at [www.macworld.com/customer\\_service](http://www.macworld.com/customer_service) or <http://service.macworld.com>. You can use online subscription services to view your account status, change your address, pay your bill, renew your subscription, report a missing or damaged issue, get the answers to frequently asked questions, and much more.

To start subscribing, visit <http://subscribe.macworld.com>.

**U.S. Mail** Macworld Subscriptions Department  
P.O. Box 37781, Boone, IA 50037-0781  
(If you are writing about an existing account, please include your name and address as they appear on your mailing label.)

**E-mail** [subhelp@macworld.com](mailto:subhelp@macworld.com)  
(Send your full name and the address at which you subscribe; do not send attachments.)

**Fax** 515/432-6994

**Phone** 800/288-6848 from the United States and Canada; 515/243-3273 from all other locations

The one-year (12-issue) subscription rate is \$34.97; the two-year rate, \$59.97; and the three-year rate, \$79.97. Foreign orders must be prepaid in U.S. funds; add \$10 per year for postage to Canada or \$25 per year for air freight to all other countries. Checks must be made payable in U.S. currency to Macworld. Please allow 3 to 6 weeks to receive your first issue or for changes to be made to an existing subscription.

### MACWORLD EDITORIAL

The editors of Macworld welcome your tips, compliments, or complaints. Some stories and reviews from past issues can be located at [www.macworld.com](http://www.macworld.com). We are unfortunately unable to look up stories from past issues; recommend products; or diagnose your Mac problems by phone, e-mail, or fax. You can contact Apple toll-free, at 800/538-9696, or visit the company's Web site, at [www.apple.com](http://www.apple.com). For editorial and advertising contact information, please turn the page.

### August 2007, Volume 24, Issue 8

Macworld is a publication of Mac Publishing, L.L.C., and International Data Group, Inc. Macworld is an independent journal not affiliated with Apple, Inc. Copyright © 2007, Mac Publishing, L.L.C. All rights reserved. Macworld, the Macworld logo, Macworld Lab, the mouse-ratings logo, MacCentral.com, PriceGrabber, and MacDeveloper Journal are registered trademarks of International Data Group, Inc., and used under license by Mac Publishing, L.L.C. Apple, the Apple logo, Mac, and Macintosh are registered trademarks of Apple, Inc. Printed in the United States of America.

**IDG**  
INTERNATIONAL DATA GROUP



# Go BARE this Summer

ADD internal capacity to Apple® Mac Pro, PowerMac® G5, and iMac® G5:

## Maxtor® MaXLine Pro SATA II

500GB 7200RPM 16MB Enterprise Hard Drives

Enterprise-class nearline application ready drives for maximum performance, reliability, and cost-effectiveness.

**ONLY \$99.99**

**- that is 20 cents per GIG!**

Special Bundle MaXLine Pro SATA II

w/ Prosoft Engineering Data Backup III **ONLY \$119.99!**

## or Fully Dressed with Award Winning Storage Solutions

### OWC Mercury Elite-AL Pro

500GB 7200RPM 16MB Cache 'Quad Interface'

FireWire 800/400/USB2/eSATA

**NOW ONLY \$229.99**

Plug-n- Play between all your systems via any of its four interface options.



Photoshop User

★★★★★

Macworld



### OWC Mercury™ Elite-AL Pro RAID

1.0TB 7200RPM 32MB Cache

FW800/400+USB2 Performance RAID

**NOW ONLY \$349.99**

Plug-n- Play high performance 2 x 500GB RAID solution for your demanding storage needs.



### NewerTech® miniStack® v3

500GB 7200RPM 16MB Cache 'Quad Interface'

FW800/400/USB2/eSATA + Hub

**NOW ONLY \$249.99**

High performance, flexible interface storage solution with integrated FireWire 400/800+USB2 hubs built in!



## Plug -n- Play

with ANY Mac® or PC

Requires an available port.

All these storage solutions includes utility software: Prosoft Engineering® Data Backup III, NovaStor NovaBACKUP®, Intech® SpeedTools Utilities™, all cables (except eSATA cable) and two year full solution warranty.

Find these Sizzling Summer Deals and more at [www.macsales.com/summer](http://www.macsales.com/summer)



# Other World Computing

Visit: <http://www.macsales.com> or Call: 800.275.4576



Mercury is a trademark of Other World Computing. NewerTech and miniStack are registered trademarks of Newer Technology, Inc. Other marks may be the trademark or registered trademark property of their owners. Prices, specifications, and availability are subject to change without notice.





## Manage your success

As if your plate wasn't already full, now you are now managing a mission critical project across four different departments. And by the way, it's already behind schedule. Your mission: deliver it on time and on budget. A tall order - but you're not worried.

Your secret? You have Project X!

While other project managers spend their time entering time and cost information so they can track their projects, you use Project X's unique Web App so your resources do the tedious data entry for you. One click instantly incorporates their timesheets, expense reports and other task information so you can spend your time where it counts—on managing your project!

Successful project management has never been so easy.



# Project X™

Project management for the rest of us.

[www.projectx.com](http://www.projectx.com)



Available at Apple stores

Version 1.1.1 Now Available



# Macworld

**Senior Vice President/  
Group Publisher** Michael Carroll (508/370-0842)

**Publisher** Paul Zampitella (781/944-0528)  
**Magazine Account  
Director, West** Jason Thach (760/736-9228)  
Leslie Piper (415/243-3509)

**Online Sales Manager, East** Paul Bonarrigo (508/370-0844)

**Online Sales Manager, West** Niki Stranz (415/243-3664)

**Account Manager, Showcase** Kenji Kawakami (415/243-3628)

**Ad Operations Specialist** Cas McGee (415/243-3575)

**Sales Associate** Sandy Wong (415/978-3181)

**Senior Director, Marketing** Michelle Kloss (415/978-3380)

**Marketing Specialist** Rose Kwass (415/978-3168)

**Marketing Specialist** Roxanne Warrick (415/978-3298)

**Executive Asst.  
to the President**

**Production Director** Steve Spingola

**Prepress Manager** Tamara Gargus

**Booking and Billing Manager** Ricardo Sandoval

**CTO** Aaron Jones

**Development Director** Bill Cappel

**Senior Vice President/  
General Manager, Online** Stephan Scherzer

**Vice President,  
Business Development** Ulla McGee

**Director, Business and  
Legal Affairs** Sue Krenk

**Director, Online Marketing** Alexa Wriggins

**Director, Business Development** Brian Bulzer

**Manager,  
Business Development** David Lake

**Online Community Manager** Kellie Parker

**VP, Human Resources** Kate Coldwell

**Director, Human Resources** Lisa Hess

**Human Resources Coordinator** Ellen Malinowski

**Director, Consumer Marketing** David Cobb

**Newsstand Director** Holly Drawbaugh

**Director, Retention Marketing** Lisa Radler

**Senior Manager,  
Retention Marketing** Robyn Patty

**Retention Marketing  
Coordinator** Shavon Burden

**Director, Subscription  
Acquisition** Linda Trinh

**Subscription Marketing  
Manager** Jennifer Ma

**CFO** Vicki Peilen

**Director, Finance** Diane Ryczek

**Director, Accounting** Michelle Reyes

**Staff Accountants** Lee Ann Baldwin

Scott Lum-Duenas

### HOW TO CONTACT MACWORLD STAFF

Our offices are located at 501 Second Street, 5th Floor, San Francisco, CA 94107; phone, 415/243-0505; fax, 415/243-3545. Macworld staff can be reached by e-mail at [firstname\\_lastname@macworld.com](mailto:firstname_lastname@macworld.com).

### LETTERS TO THE EDITOR

Send comments about any aspect of Macworld to [letters@macworld.com](mailto:letters@macworld.com). Due to the high volume of mail we receive, we can't respond to each letter. We reserve the right to edit all submissions. Letters published in Macworld or on Macworld.com become the property of Mac Publishing.

### BACK ISSUES OF MACWORLD

Starting with the March 2003 Macworld, back issues can be downloaded in digital format, from [www.zinio.com](http://www.zinio.com) (\$6.99; Mac OS X 1.0.3 or later required). Print-format back issues (subject to availability) cost \$8 per issue for U.S. delivery, \$12 for international delivery; prepayment in U.S. currency to Macworld is required. Send a check or money order to Macworld Back Issues, P.O. Box 37781, Boone, IA 50037-0781; or phone 800/288-6848 (U.S. and Canada) or 515/243-3273 (all other locations).

### REPRINTS AND PERMISSIONS

You must have permission before reproducing any material from Macworld. Write to Macworld Reprints and Permissions, 501 Second Street, 5th Floor, San Francisco, CA 94107; include a phone number. To order reprints of your company's editorial coverage, call Reprint Management Services at 717/399-1900; fax 717/399-8900; or e-mail [macworld@reprintbuyer.com](mailto:macworld@reprintbuyer.com).

### MAILING LISTS

We periodically make lists of our customers available to mailers of goods and services that may interest you. If you do not wish to receive such mailings, please write to us at [subhelp@macworld.com](mailto:subhelp@macworld.com), P.O. Box 37781, Boone, IA 50037-0781, or e-mail us at [subhelp@macworld.com](mailto:subhelp@macworld.com). Please include a copy of your mailing label or your full name and address.

### MACWORLD CONFERENCE & EXPO

As the flagship sponsor of Macworld Conference & Expo, Macworld encourages all subscribers to attend this exciting annual industry event. For information, please visit [www.macworldexpo.com](http://www.macworldexpo.com).







## you could if you wanted to

A furniture solution for work sessions that go into the wee hours? Well, actually it's just a whimsical "what if." But it proves that Anthro's built-in modularity helps you do things with furniture you never thought possible. Here, for example, is our extra-strong AnthroBench



showing off its muscle and some handy outboard shelves. So for a workstation that fits you and your work exactly, contact our friendly and knowledgeable folks at **800.325.3841** or [anthro.com/mac](http://anthro.com/mac). We'll help configure something just for you!



Elevate™ Corner, Electric Lift Table



Adjustable Laptop Cart



Fit System® Console Unit





[ Enter Promo Code MCW20807 for a **FREE T-SHIRT** with these items ]

# Don't go to **EXTREMES**

*Cruelty free deals offered daily at Newegg*



**LACIE**



**\$439<sup>99</sup>**

**LACIE 301149U**  
Bigger Disk Extreme  
1.28TB 7200 RPM 3.5"  
External Hard Drive  
USB 2.0 / IEEE 1394a / 1394b

**LACIE**



**\$129<sup>99</sup>**

**Lacie 301146U**  
d2 320GB 7200 RPM 3.5" USB  
2.0 External Hard Drive

**Microsoft**



**\$429<sup>99</sup>**

**Microsoft Y15-00001**  
Office Mac Professional 2004  
Mac OS X version 10.2.8-10.3

**Microsoft**



**\$184<sup>99</sup>**

**Microsoft 731-01163**  
Mac OS X-compatible processor  
Office 2004 for Mac - OEM

**Microsoft**



**\$129<sup>99</sup>**

**Microsoft BD6-00001**  
Office Standard 2004 for Mac  
Student and Teacher Edition



**NO PAYMENTS FOR 6 MONTHS**

with your **Newegg.com Preferred Account**  
See website for more information. Promotion ends 09/30/07



Seagate



**\$239.99**

**Seagate ST3750640AS**  
Barracuda 7200.10 750GB 7200 RPM  
16MB Cache Hard Drive - OEM

NETGEAR



**\$129.99**

**Netgear WNR854T**  
IEEE802.11n draft specification IEEE802.11g,  
IEEE 802.11b Wireless Router Gigabit Edition

BOOKENDZ



**\$269.99**

**BookEndz BE-MBP15F**  
Docking Station for 15" MacBook Pro

XtremeMac



(iPod not included)

**\$109.99**

**XtremeMac IPD-LUN-00**  
Alarm Clock Audio System the world's  
most intelligent alarm clock for iPod.

WD Western Digital



**\$378.99**

**Western Digital WDG2TP10000N**  
My Book Pro II 1TB 7200 RPM USB 2.0 /  
IEEE 1394a / 1394b External Hard Drive

WD Western Digital



**\$119.99**

**Western Digital WD5000AAKS**  
Caviar SE16 500GB 7200 RPM 16MB  
Cache SATA 3.0Gb/s Hard Drive - OEM

GRIFFIN



(iPod not included)

**\$89.99**

**Griffin 1202-PRTPSPKR**  
Journi Portable Speaker System For  
iPod

SCOSCHE



**\$69.99**

**Scosche IPNRF5**  
iPod & Nano Wireless RF Sport Remote  
150 ft Wireless Range

• 99% of orders ship within 1 business day • Over 675,000 product reviews from customers  
• "A" rating on ALL merchant ranking sites • Over 50,000 customer testimonials

CREATIVE



(iPod not included)

**\$199.99**

**Creative MF8046**  
Cambridge SoundWorks PlayDock  
Works with most of the iPod

CREATIVE



**\$58.99**

**Creative 70SB072000000**  
XMOD- USB Sound Blaster for PC  
& Mac

MOBILEEDGE



**\$54.99**

**Mobileedge MEBSP4**  
Black/Yellow 17" SecurePack Backpack  
Dedicated pocket for MP3 or CD player

macally



**\$29.99**

**Macally POD-FMTF**  
Full Channel Auto & Home FM Transmitter/  
Charger for iPod

speck PRODUCTS



**\$37.99**

**Speck Products MB13-GRN-SEE**  
MacBook 13" See Thru - GREEN Model  
MB13-GRN-SEE

speck PRODUCTS



(iPod not included)

**\$24.99**

**Speck Products IV-ACTIVE-ARM**  
Comfortable, breathable Mesh Securely  
holds your iPod Sporty Armband Case

BELKIN



(iPod not included)

**\$14.99**

**Belkin F8Z115**  
iPod video acrylic case Clear/brushed  
metal with touch-sensitive plastic cover

iLuv.



**\$11.99**

**iLuv i301WHT**  
"In-ear" Earphone for Your iPod and  
Many Other Audio Devices



# Mac Meets Windows

Plus: the ultimate home office, AirPort Extreme, and more

## Parallels Report

Thanks for writing the article about running Windows on a Mac ("4 Ways to Windows," May 2007). I have one question: I'm about to buy a new Mac mini. I'd really like to purchase Apple's Bluetooth keyboard and mouse with it. But in your article, you said Parallels' Bluetooth support was poor. Should I just use Boot Camp instead?

David Pulphus

They should work fine. You might have trouble with Bluetooth devices that don't have native OS X support, but that clearly isn't the case with Apple keyboards and mice. For instance, a Bluetooth GPS with Windows drivers probably won't work in Parallels (it should work fine in Boot Camp, though). I use a wireless keyboard and mouse all the time in Parallels and VMWare Fusion with no problem.—Rob Griffiths

Rob Griffiths' article gave me just the info I needed to order a MacBook Pro with Parallels. But I was confused by one thing. Griffiths states about Paral-



ls, "You can also run Windows XP from a Boot Camp partition—meaning that you need only one copy of Windows XP." But in "Which Windows?" Christopher Breen writes, "Microsoft demands that each installation have its own license. So if you wish to install it in both Boot Camp and a virtualization application, you'll need two Windows

licenses." Does this mean that Parallels can access the OS in the Boot Camp partition without problems?

Thom Duncan

In "Which Windows," Christopher was talking about Microsoft's licensing for Vista, which is quite complex. But if you're running XP with Boot Camp and Parallels, you need only the one license.—Rob Griffiths

I have been lured to the Dark Side. Instead of replacing my aging G4 with a new Intel-based Macintosh, I have purchased a Dell PC. My main reasons: I need to run some OS 9 programs (especially PageMaker); and if I have to buy a Windows version (because OS 9 won't run on those new Intel Macs), I may as well run it on a Windows PC. Also, with every update, OS X has become more bloated with new features that I don't use and that often get in the way.

Steven Rudolph

Your attempt to promote Microsoft Vista and related Microsoft software was laughable. Anyone who has ever run Microsoft programs will quickly tell you that they are the most bug-ridden, glitch-filled, unproductive programs on the planet. Anyone who would buy a Mac and then load it with such terrible software should have his or her head examined. You can put lipstick on a pig, but in the end you'll still have a pig.

Tom Kirkman

## The Not-So-Ultimate Office

No UPS solution for "The Ultimate Home Office" (May 2007)? Christopher Breen must think either that home power generators are common, or that it is no big deal to save your work every few minutes.

Scott Bunnell

## OVERHEARD ON THE FORUMS



**I disagree with the notion of adding subscription services to the iTunes Store. All it will bring is complexity and confusion. Which of my songs are subscription based and which are purchased? Which ones can I burn to a CD and which can I not? Too many hassles.**

whitedog  
macworld.com/2773

I have never in my 15 years of loving and using Macs seen so many people switch from Windows to Macs, and almost every one of them has switched to a MacBook.

hautster  
macworld.com/2774



While I'm a firm believer in having a robust UPS (or two or three), my main goal in that story was to come up with lists of equipment necessary to get your work done *right now*. I wasn't willing to sacrifice vital computers or software in order to make room for a UPS, which, while I rely on them, not everyone absolutely requires. Fortunately, the budgets I used in that story are arbitrary, and readers who require a UPS certainly should invest in one.—Christopher Breen

I work for Apple as a product specialist. I was reading "The Ultimate Home Office" in your May 2007 issue and ran across something you should be aware of. In "The Luxury Office" you wrote, "Finally, when you're carrying around—and possibly dropping—a laptop, Apple's three-year extended warranty can give you some piece of mind. . . ." Apple's AppleCare Protection Plan does not cover any sort of accidental damage.

✉ **Joey Kelly**

Absolutely correct. Regardless, AppleCare remains a good investment for a computer that is likely to get jostled during normal use.—Scholle Sawyer McFarland

In "The Ultimate Home Office," Christopher Breen claims that "Having Apple install RAM was once prohibitively expensive, but now the company's prices are competitive." He then says that Apple's RAM prices are cheaper than those of Crucial. Really? I just bought a new 15-inch 2.16GHz MacBook Pro. Apple offered to increase the RAM from the standard 1GB to 2GB for \$175. Instead, I purchased another 1GB stick of RAM from Crucial's Web site for \$67.

✉ **Domenico Bettinelli**

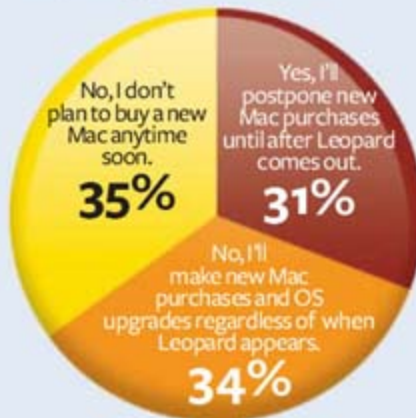
When I wrote that feature, Apple's prices were indeed lower than Crucial's. So the common wisdom—that RAM always costs more from Apple than from other vendors—isn't as common as it once was. But RAM prices are volatile, so it's worth shopping around.—Christopher Breen

## Rough Landings

Regarding your review of the new AirPort Extreme Base Station: why did you give it a rating of **★★★★**? The fact that it has no Gigabit Ethernet ports should

## READER POLL

Will Apple's delayed release of Leopard affect your Mac-buying plans at all?



Research: Karlin Associates

have knocked off a full mouse. Other problems include the absence of an option for excluding 802.11b devices, and the way my AirPort Extreme crashes whenever I'm doing a long download; I have to reset it physically just to get back on to administer it. To me, those flaws add up to another full mouse off. Not everything Apple makes is awesome.

✉ **Alex Papayannis**

## Way-Back Machines

I like your article on what to do with old Macs ("New Life for Old Macs," April 2007), but could you get a little *older* in your thinking? A Mac that can run OS X 10.4 is not an *old* Mac. Can you do an article on, say, a Quadra 660AV stuck at OS 8?

✉ **Mike Riess**

## The Important Ports

In your May 2007 issue, you have a very informative article about how to set up a secure VNC session through an SSH tunnel (*Geek Factor*). It's mostly correct, except on one point: you say that if you have a NAT router, you need to use port forwarding on port 5900 and on port 22 for SSH. But if you're using SSH tunneling, you need to forward only one port—the SSH port 22. To the remote server, it will look like connections are local. Setting up port forwarding for 5900 makes

the remote VNC server accessible directly, which isn't really a good idea.

✉ **Paul Linden**

You are correct. Thanks for the clarification.—Rob Griffiths

## The Mighty Fall

I had to laugh when I read your May hard-drive review ("One Drive Fits All"). You said, "[SATA is] here to stay, and we'll be using it for years to come." Just like SCSI, Zip, Jazz, and a long list of other old technologies. As soon as another faster storage system emerges, SATA will be as relevant as SCSI.

✉ **Bob Collins**

## Welcome to My Shop

Many thanks to Jonathan Seff for his easy-to-follow guide to converting video for the iPod and TV (*Playlist*, May 2007). As a huge animation buff, I've been dying to rip my DVDs of the "Looney Tunes Golden Collection" to my Mac but was unsure of the best way to do it. Now I can watch Bugs Bunny give Elmer Fudd the haircut of a lifetime in "Rabbit of Seville" wherever I go.

✉ **Roger Hagy, Jr.**

## Corrections

In July's *Feedback*, one of the wedges in the "Reader Poll" pie chart was incorrect. The "I don't have plans to upgrade at this time" number should have been 11 percent, not 36 percent.

## Contact Us

✉ Post comments on our forums ([www.macworld.com](http://www.macworld.com)); send them by mail to ✉ Letters, Macworld, 501 Second Street, 5th Floor, San Francisco, CA 94107; or send them by e-mail to [letters@macworld.com](mailto:letters@macworld.com). Include a return address and daytime phone number. Due to the high volume of mail we receive, we can't respond personally to each letter. We reserve the right to edit all letters and posts. All published letters and forum comments become the property of Macworld.



# Mac Beat



## OPERATING SYSTEM

# More of Leopard Revealed

Steve Jobs shows off new features of OS update **BY PHILIP MICHAELS**

**W**hen Mac OS X 10.5, code-named Leopard, makes its debut in October, it will feature a redesigned Desktop and a new Finder. Those features were among the changes that Apple CEO Steve Jobs introduced while previewing the forthcoming OS X update during his Worldwide Developers Conference (WWDC) keynote speech.

Originally planned for a spring 2007 release, OS X 10.5 is now slated to come out in October. The finished version will include 300 new and enhanced features, and it will cost \$129.

### Updated Desktop

The redesigned Desktop does away with the familiar blue background

design that Jobs said users almost never employ. The background he showed during the keynote featured blades of dew-covered grass, but Apple fully expects users to pick their own images. To that end, Jobs said that Apple updated the Desktop to better accommodate people's digital photos; the menu bar is now semitransparent, and the Dock is reflective (and somewhat three dimensional).

More significantly, the redesigned Dock in Leopard introduces Stacks—a collection of folders that Apple sees as a way to clean up desktop clutter. Files are collected in the Stacks for rapid access; click on a Stack in the Dock, and the files and folders fan out or appear in a grid. Clicking on one of

those icons instantly launches the relevant program or file. You create Stacks by dragging any folder or group of items to the Dock. As part of Stacks, the new Desktop also features a dedicated Downloads folder.

Other enhancements in Leopard's Desktop include a consistent look for windows and a more prominent indication of the active window.

### New Finder

OS X 10.5's Finder features a new sidebar that's reminiscent of the Source list in iTunes. The sidebar is organized into Devices, Shared, Places, and Search For headers; a clickable triangle next to each header lets you close a section when you're not using it.

IMAGE COURTESY OF APPLE



In addition to the Icon, List, and Column views in the Finder, Leopard has an iTunes-like Cover Flow view. The Finder's Cover Flow view allows you to scroll through images of Microsoft Word documents, QuickTime movies, iPhoto pictures, and other files, much as you would album covers in iTunes. In Cover Flow view, you can advance through multipage documents or play QuickTime movies by clicking on the relevant file.

Finder searches are also streamlined, thanks to prebuilt searches grouped under the Search For header in the sidebar. In addition to having access to prebuilt searches, you can also assemble your own.

Leopard's Finder allows Spotlight searches of other Macs, Windows machines, and servers on a network, to make browsing shared files easier. And with a .Mac account and the new Back To My Mac feature, you can search and retrieve files stored on other computers, even when you're on the road.

Spotlight searches in the Finder incorporate the enhancements to the built-in search functionality that Jobs outlined last August. Those enhancements include the ability to use Boolean logic to narrow search results with AND, OR, and NOT commands. You can also search for exact phrases in Spotlight by using quotation marks, as well as search by using dates, ranges, absolute dates, and simple calculations.



**Quick Look** You can preview a file without launching its application.



**iChat Backgrounds** New effects in iChat make video chats a lot more fun.

### Other Features

Jobs's OS X 10.5 demonstration showed a brand-new Leopard feature called Quick Look. The feature offers live file previews without requiring users to launch applications. Quick Look's previews can be multipage and are available in full-screen views. By the time Leopard ships, Quick Look will work with text files, images, movies, PDFs, and Microsoft Word and Excel documents; Apple says that developers will be able to expand Quick Look to work with other file types because it's based on a plug-in architecture.

Leopard also includes Safari 3, a new version of Apple's Web browser (see "Apple Brings Safari to Windows").

Other Leopard features Jobs highlighted during his hour-long demonstration were recaps of capabilities he first previewed at WWDC in August 2006, with a few bits of new information. Among those discussed was Boot Camp, Apple's application for installing and running Windows on an Intel-based Mac; as announced last August, Boot Camp will be included with Leopard and won't require users to burn driver CDs as part of the installation process. Boot Camp will also include a quicker way to switch between OS X and Windows, without having to restart your computer each time.

(Although not mentioned in the keynote, Apple also released information about several other features, including DVD Player and Front Row—see [macworld.com/2890](http://macworld.com/2890) for more details, and go to [macworld.com/2892](http://macworld.com/2892) for our Leopard FAQs.)

**Philip Michaels** is the executive editor of [Macworld.com](http://Macworld.com).

## Apple Brings Safari to Windows

Apple expanded its presence on the Windows platform by releasing a Windows-compatible public beta of its Safari Web browser. The final version, Safari 3, will be included with Mac OS X 10.5, and will be a free download for users of OS X 10.4, Windows XP, and Windows Vista in October.

According to figures cited by Apple CEO Steve Jobs, Safari currently captures about 5 percent of the browser market; Microsoft's Internet Explorer (IE) commands 78 percent of the market, and Mozilla's Firefox has a 15 percent share.

"The Mac's market share is great, but we want to grow, and, in order to do that, we have to create a version of Safari on Windows," Jobs told WWDC attendees. "And that's exactly what we've done."

Apple promises a speedy version of Safari for Windows. The company says that Safari performed twice as fast as IE in an iBench HTML performance suite test—2.2 seconds to IE's 4.6 seconds. The Apple browser performed similarly on iBench's JavaScript test, completing the suite in less than a second compared with IE's time of 2.4 seconds.

Other changes in the latest version of Safari include an integrated Find banner that resides below the Bookmarks bar, the ability to drag and drop tabs as you can with bookmarks, and resizable text fields. Once final, Safari 3 will also feature a toolbar button that activates the Web Clip feature for creating Dashboard widgets. You can read more about Safari 3's new features in our first look of the browser beta at [macworld.com/2891](http://macworld.com/2891).

Safari joins a growing number of Windows-compatible Apple programs; the company also produces versions of its iTunes music application and QuickTime multimedia player for Windows. —PHILIP MICHAELS





## SMART PHONES

# Developers Get Some iPhone Access

Web applications will work through Safari

In addition to getting another preview of Mac OS X 10.5, developers at Apple's WWDC received some welcome news from Apple CEO Steve

Jobs—they'll be able to write applications that will run on the company's highly anticipated iPhone.

Jobs ended his 90-minute keynote by inviting Scott Forstall, Apple's vice president of iPhone software, to show what Jobs called an "innovative new way to create apps for [the] iPhone."

To maintain the security of the iPhone, Apple decided not to let developers write standard applications for the device; rather, they'll create Web 2.0 applications that run within the version of Safari included on the iPhone. Those Web apps can integrate with the iPhone's built-in services, giving them access to making a call or looking up a location in Google Maps. Since most of the application code runs on a server, Apple said, the software is both secure and easy to update.

For his demo, Forstall showed an Apple Directory Web application the company wrote that taps into an internal LDAP database. —JONATHAN SEFF



## GAMES

# EA Makes Play for Mac Gamers

Company promises its support

Taking the keynote stage with Steve Jobs, Electronic Arts (EA) cofounder and chief creative officer Bing Gordon told attendees of Apple's WWDC that the video and computer game publisher would return to the Mac beginning in July, with four of its most popular games: Command & Conquer 3 Tiberium Wars, Battlefield 2142, Need for Speed Carbon, and Harry Potter and the Order of the Phoenix. In August, EA will ship Madden NFL 08 and Tiger Woods PGA Tour 08. The plan is for EA to release the Mac versions of all of

these games simultaneously with their PC and console counterparts.

Because these games are coming to the Mac by way of TransGaming Technologies' Cider, they will run only on Intel-based Macs. —PETER COHEN



## PRODUCT WATCH

## HARDWARE

**Exilim Zoom EX-Z1200**, from Casio ([www.casio.com](http://www.casio.com)): This 12.1-megapixel camera with a 3x optical zoom lens features face-detecting autofocus technology (\$400).

**ToughTech XE mini**, from WiebeTech ([www.wiebetech.com](http://www.wiebetech.com)): This pocket external hard drive enclosure, which is available in capacities up to 160GB, features external Serial ATA and USB 2.0 interfaces in a single port, as well as two FireWire 800 interfaces (\$120 to \$280, depending on capacity).

## NEWS IN BRIEF

## MacBook Pros Get Santa Rosa Chip Set

On the heels of an update to its MacBook line (see our review on page 40), Apple has also overhauled its MacBook Pro laptops. The latest MacBook Pros feature the "Santa Rosa" chip set that Intel introduced in May. This chip pushes the laptop's frontside bus to 800MHz, up from 667MHz in earlier models, and lets the MacBook Pro accommodate as much as 4GB of RAM.

Other changes to the MacBook Pro line include a new graphics processor from Nvidia that replaces the ATI Mobility Radeon graphics chip that shipped in previous models. The two 15-inch MacBook Pro models feature mercury-free, LED-backlit displays that consume less power. Buyers of 17-inch MacBook Pros have the option of ordering a display with a higher resolution—1,900 by 1,200 pixels—for an extra \$100.

There are three MacBook Pro configurations: a 15-inch 2.2GHz model with a 120GB hard drive, for \$1,999; a 15-inch 2.4GHz offering with a 160GB hard drive, for \$2,499; and a 17-inch 2.4GHz version with a 160GB hard drive, for \$2,799. See [macworld.com/2881](http://macworld.com/2881) for Macworld Lab benchmarks.

## Adobe Tells Free-Hand Users to Move to Illustrator

The end is nigh for Free-Hand MX, the venerable vector-based illustration program that became the property of Adobe after the company bought Macromedia in 2005. Adobe has told Free-Hand users that it won't develop any new features for Free-Hand, which was last overhauled four years ago, nor will it deliver patches or updates for new operating systems and hardware. To ease the transition, Adobe has created an FAQ (see it at [macworld.com/2854](http://macworld.com/2854)); it will also offer an upgrade path to the newly released Illustrator CS3, for \$199.







## INSPIRED IN DESIGN. INSPIRED IN PRINTING.

You design because you're inspired. It shows in your best work. And your prints should express every ounce of that inspiration. That's why the new HP Z series printers produce breakthrough color accuracy via a built-in spectrophotometer that analyzes color and calibrates it to match the media used. So you get accurate and consistent color print to print, media to media. And creating ICC color profiles is quick and easy. Plus the Designjet Z2100 boasts 8 Vivera pigmented inks that can match almost every color in the spectrum—for brilliant comps, layouts, contact sheets, mockups or exhibition prints. Do your inspirations justice like never before.



HP PHOTOSMART PRO B9180\*  
13" x 19" 8 Vivera pigmented  
inks desktop printer



HP DESIGNJET Z2100\*  
24" – 44" pedestal printer  
with 8 Vivera pigmented inks



HP DESIGNJET Z3100\*  
24" – 44" pedestal printer  
with 12 Vivera pigmented inks

**HP EXTREME UPGRADE:** Get up to \$1,000 cash back and up to \$500 in free media when you buy a new HP Designjet Z Series Photo Printer OR \$100 cash back with a new HP Photosmart Pro B9180 Photo Printer! Details at [www.hp.com/go/extreme8](http://www.hp.com/go/extreme8)

\*U.S. residents only. Cash back provided by mail-in rebate available for eligible purchases made February 1, 2007 through July 31, 2007 for HP Designjet Z series printers or May 1, 2007 through July 31, 2007 for the HP Photosmart Pro B9180 printer. Free media available with HP Designjet Z series printer purchase while supplies last. Additional restrictions apply. Void where prohibited, taxed, or restricted by law. For qualifying product options, terms and conditions, and store hours, visit [www.hp.com/go/extreme8](http://www.hp.com/go/extreme8). \*Mac and PC fully compatible. © 2007 Hewlett-Packard Development Company, L.P. All rights reserved. The information contained herein is subject to change without notice. Some of the images are simulated.

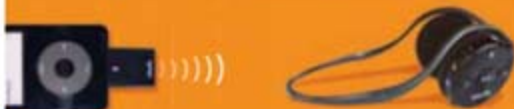






Retire the wire.

Bluetooth® wireless headphones.  
Exceptional sound. On-earpiece controls.  
Designed for iPod®. **iMuffs.com**



© 2007 WiGee Inc. All rights reserved. WiGee, the WiGee logo, and the WiGee logo are trademarks of WiGee Inc. The Bluetooth word mark and logo are owned by the Bluetooth SIG, Inc. and any use of such marks by WiGee Inc. is under license. iPod is a trademark of Apple Computer, Inc., registered in the U.S. and other countries. All other products and services may be marks of their respective owners. Specifications subject to change. Patent pending.

## When Steve Met Bill



**Side by Side** No, that's not a Photoshop trick—Steve Jobs and Bill Gates appeared alongside each other during May's D: All Things Digital conference in Carlsbad, California. The two tech heavyweights reminisced about the past while looking ahead to the future of computing. (Read *Macworld's* account of the Jobs-Gates summit at [macworld.com/2862](http://macworld.com/2862).)

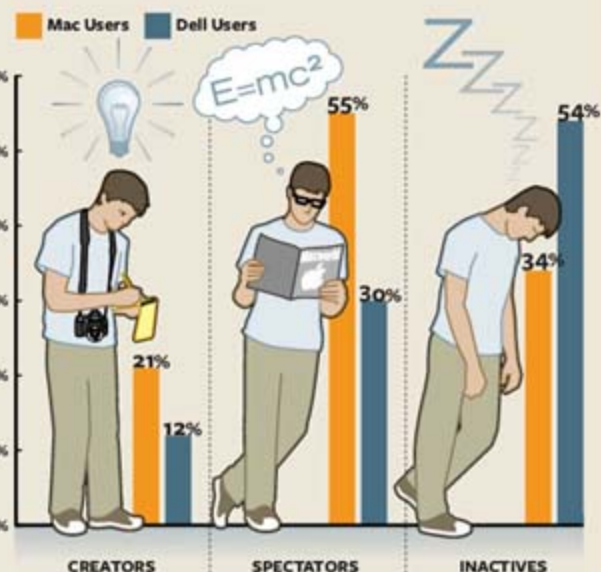
Jobs on aging along with Gates:  
“When Bill and I first met each other, we were both . . . the youngest guys in the room, right? . . . And now when we're working at our respective companies, I'm the oldest guy in the room most of the time.”

Gates on what he envies about Jobs:  
“I'd give a lot to have Steve's taste . . . I'd see Steve make a decision based on a sense of people and product that is even hard for me to explain. The way he does things is just different, and I think it's magical.”

## TECH TRENDS

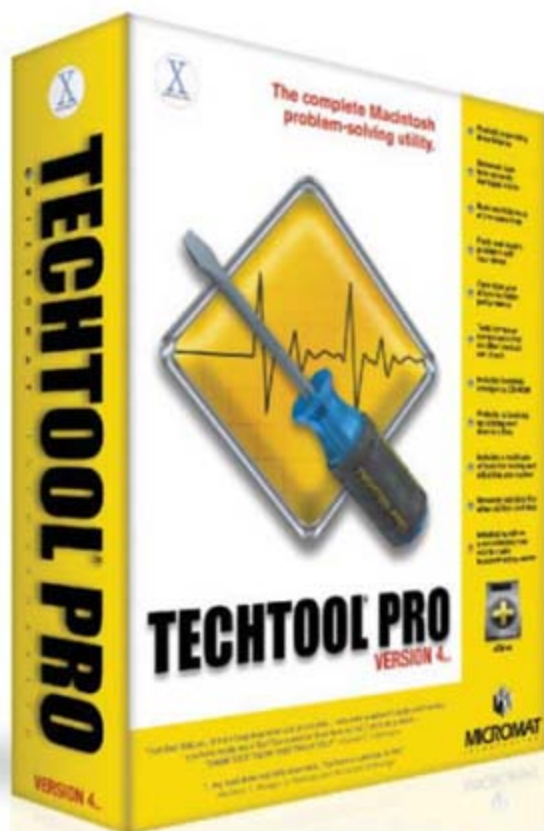
### Web Creators

A new Forrester report divides the U.S. online population into six groups according to their social participation on the Web. More than one-fifth of those classified as Creators—people who blog, publish Web sites, upload videos, or participate in other content-creation activities—own Macs, while only 12 percent own Dell computers. The majority of Spectators own Macs, while the majority of Inactives own Dells. For the complete chart, see [macworld.com/2821](http://macworld.com/2821). —MARYANN JONES THOMPSON



INFOGRAPHIC BY CHRIS PHILPOT





## Maintain your Mac like a Pro.

The complete Macintosh problem solving utility.  
Now for both Intel and PowerPC Macs.

Why throw away your money on a multitude of utilities that force you to learn different interfaces and deal with a variety of companies and/or different products? Micromat gives you everything you need in one box—for far less money. TechTool Pro is a complete Macintosh repair shop in a box. In fact, it's so good that Apple includes a copy of its sibling, TechTool Deluxe, in its AppleCare Protection Plan. If you experience freezes, kernel panics, or other problems, TechTool Pro can help you get your computer running smoothly again. Nothing else even comes close to TechTool Pro! Use TechTool Pro for:



### Diagnostics and Repair

Ensure that your computer keeps running its best.



### Optimization

Enhance the overall performance and simplify file layout of your hard drives.



### Data Recovery

Recover important data from corrupted hard drives.



### Safety

Protect your computer and hard drives automatically in the background.



### eDrive

Create an emergency startup partition so TechTool Pro is always available.

TechTool Pro is a feature-packed release of the most comprehensive diagnostic, repair, and maintenance utility of all time! A must-have Macintosh application, this utility from Micromat is truly the one indispensable product you need to ensure your Mac is always trouble free.



Micromat, Inc., 5329 Skylane Blvd., Santa Rosa, CA 95403, USA  
800-829-6227 707-566-3831 [info@micromat.com](mailto:info@micromat.com) [www.micromat.com](http://www.micromat.com)

©2007 Micromat, Inc. All rights reserved. TechTool is a registered trademark of Micromat, Inc. DiskStudio and Protege are trademarks of Micromat, Inc.





## DISPLAYS

# When 'Millions' of Colors Equal 262,144

Lawsuit raises questions over display-industry claims

**T**wo Mac users have filed a class-action lawsuit against Apple that contends the company misrepresents the amount of colors its laptops can

display. Specifically, the suit alleges that MacBooks and MacBook Pros are capable of displaying only the illusion of millions of colors through a technique called *dithering*, in which colored pixels from within the available palette are blended together to approximate other colors.

The merits of the case will be decided in due time; however, the dispute has raised some interesting questions about how hardware makers—including Apple—market their displays.

Upon hearing of the lawsuit, the first thing I did was look up the stats on my own MacBook. It uses an LG Electronics LP133WX1-TLA1 display, which, according to LG Philips, is 6 bit and capable of displaying 262,144 colors. Contrast that

with the tech specs Apple lists for the MacBook: a 13.3-inch (diagonal) glossy TFT wide-screen display with support for millions of colors.

An article on About.com (go to [macworld.com/2855](http://macworld.com/2855)) explains that it's a standard industry practice to say that 6-bit displays support 16.2 or 16 million colors, even though they can't actually display those colors without dithering.

Many Mac users are extremely color-sensitive design and graphics professionals. Even if it turns out that the display industry's standard practice is legitimate, Apple owes its customers a more-thorough disclosure of what they get when they buy an Apple computer or display.—**JASON SNELL**



**Color Complaints** In dithering, pixels from within the available palette are blurred together to create the appearance of another color.

ILLUSTRATION BY STEVE STANKIEWICZ

**STARDOM®**  
STORAGE SOLUTIONS

A perfect shot, a peace of mind...

**THE SR6600 PROFESSIONAL**

When you've got the shot, then securing that shot should be just as critical. Introducing the SR6600 miniature desktop storage system, that will store over 2TB of captured images with RAID 6 protection to leave you with a productive workflow, to leave you with a peace of mind.

[www.stardom.com.tw/dvs/SR6600](http://www.stardom.com.tw/dvs/SR6600)

**USA**

Otherworld Computing  
[www.macsales.com](http://www.macsales.com)

4VideoEquipment  
[www.4videoequipment.com](http://www.4videoequipment.com)

**Canada**

Synetic  
[www.synetic.net](http://www.synetic.net)

**European Region**

Raidsonic  
[www.raidsonic.de](http://www.raidsonic.de)

**UK**

Raidus  
[www.raidus.co.uk](http://www.raidus.co.uk)

**Italy**

Lead Srl  
[www.leadart.it](http://www.leadart.it)

**Japan**

ASK  
[www.ask-ssd.com](http://www.ask-ssd.com)

Denno  
[www.malhey.jp](http://www.malhey.jp)

**Korea**

Andico  
[www.andico.co.kr](http://www.andico.co.kr)

**Taiwan**

Savemore  
[www.savemore.com.tw](http://www.savemore.com.tw)

**Australia**

Silicon Memory  
[www.siliconmemory.com.au](http://www.siliconmemory.com.au)

Powered By Raidon Technology - [www.stardom.com.tw](http://www.stardom.com.tw)



# Searching for MagSafe Accessories

Apple has yet to license its connection technology to third-party developers

One of the niftiest features introduced when Apple rolled out its Intel-based laptops in 2006 was the MagSafe power connector (shown here)—the magnetic ring surrounding four small power nubs at the end of the notebook's power cable. If you move the connector close to your laptop, the magnetic attraction will snap it into place. Even better, if you trip over your power cord, the MagSafe connector comes loose, saving your MacBook a trip into orbit.

There's only one problem with Apple's move to this new connector: There aren't any third-party MagSafe accessories.

For example, consider the Thin & Light power adapters from Kensington ([us.kensington.com](http://us.kensington.com)) or the juice70 from

iGo ([www.igo.com](http://www.igo.com)). These products, through interchangeable tips, let you use a single power adapter with several devices (or even multiple devices simultaneously). And they work with multiple power sources—AC wall outlets, car accessory jacks, and airline-seat DC power ports. But these products aren't compatible with the MagSafe connectors on MacBooks and MacBook Pros.



Why the dearth of third-party MagSafe products? Because the MagSafe connector is a patented technology and, according to a Kensington representative, Apple has yet to license the use of that technology to other vendors. Apple has confirmed that stance in the past to *Macworld*, but did not respond to our more recent questions on whether that policy has since changed.

Interestingly, iGo's Web site now features a page for a product now in development dubbed "notebook tip S32" that supposedly offers compatibility with the MacBook and MacBook Pro. (See for yourself at [macworld.com/2853](http://macworld.com/2853).) Could this mean the arrival of a third-party MagSafe accessory after a year and a half of slim pickings? Stay tuned.—DAN FRANKS

PHOTOGRAPH BY PETER BELANGER

## Maximize Your Mac

Increase Your Performance with Techworks Memory



Fast and reliable, TechWorks has been the trusted name in providing a full line of memory products guaranteed for Mac computers since 1986.



Other World Computing  
[www.owc.com](http://www.owc.com)

TigerDirect.com

[www.buffalotech.com/products/memory](http://www.buffalotech.com/products/memory)

# BUFFALO

STORAGE WIRELESS MULTIMEDIA MEMORY

© Buffalo Technology (USA), Inc. Buffalo Technology, the Buffalo logo and the Techworks logo are either trademarks or registered trademarks of Buffalo Technology (Buffalo Inc.). The names and logos of other companies mentioned herein belong to their respective owners.



# ultimate control

the new standard in portable midi control: edirol pcr-800/-500/-300



PCR-800



PCR-500



PCR-300

- 18 programmable velocity pads with Aftertouch
- 61/49/32 velocity-sensitive keys with Aftertouch
- "dynamic mapping"—intelligent assignment of controls
- 50 fully assignable controls, including dedicated transport buttons
- new, unique crossfader feature for use with DJ apps & notationlive.tokyo



capture creativity  
www.rolandus.com/edirol

## MAC BEAT



### MUSIC

## DRM-Free Music Arrives at iTunes

What you need to know about iTunes Plus

In April, Apple and EMI Group vowed to put DRM-free (digital rights management) versions of the record label's entire catalog on the iTunes Store. In June, the companies delivered with the launch of iTunes Plus, which offers DRM-free tracks encoded at a higher bit rate and priced for 30 cents more than the 99-cent tracks offered elsewhere at the Store. Here's what to expect from the new service.

**Updated iTunes** Although you'll spot an iTunes Plus link at the Store no matter what version of iTunes you use, you must upgrade to iTunes 7.2 to buy iTunes Plus tracks. Once you've updated, the link will take you to an iTunes Plus page, which holds What's Hot and Featured Albums boxes similar to those on the Store's main page, as well as Top Albums and Top Songs columns. The page also contains a Genre pop-up menu, from which you can choose assorted genres that will change the contents of the What's Hot and Featured Albums boxes.

**iTunes Plus Preference** When you click on an album on the iTunes Plus page, you're asked if you'd like to set your iTunes Plus preference. If you click on the iTunes Plus button in the dialog box, you'll always be shown the iTunes Plus version of a music track or music video if one is available. With the iTunes Plus preference enabled, you aren't shown the less-expensive, protected version of the track; with iTunes Plus disabled, you aren't provided with links to the DRM-free tracks unless you click on the Learn More link and, in the subsequent win-

dow, click on the iTunes Plus button to enable the iTunes Plus preference. To turn it off, go to your iTunes Store account page, where you access the option via a Manage iTunes Plus button.

**Downloads** Downloading an iTunes Plus track or album is almost exactly the same as downloading protected tracks—the one thing you can't currently do is gift unprotected music as you can with the Store's protected music. A small iTunes Plus caption appears just above the Buy Album button on an album's page, and a plus sign (+) followed by the \$1.29 price sits to the left of each track's Buy Song button. The resulting files are encoded at a bit rate of 256 Kbps and are tagged with an .m4a extension. (This is the extension for unprotected AAC files, versus the .m4p extension appended to the Store's protected AAC files.) A four-minute track comes in at just over 8MB.

**Upgrading Past Purchases** When you're logged in to the Store, click on the iTunes Plus link, and you should see an Upgrade My Library area in the upper right corner of the resulting iTunes Plus window. This allows you to upgrade compatible content—that is, other EMI music—to an unprotected form. You can upgrade an album for 30 percent of the current album price. Upgrades to individual music tracks cost 30 cents per track, and upgrading music videos costs 60 cents per video. You can't choose to upgrade individual tracks or albums—this is an all-or-nothing option for your entire compatible library.—CHRISTOPHER BREEN





- Made of non-toxic top grade durable silicone rubber;
- Contoured design and mould fit over and stay in place with each key;
- Provides full coverage protection and maintains a comfortable typing experience, non-slip feel and quiet keystrokes;
- Keeps dirt, lint, food and other particles from getting into keyboard;
- Regularly wash helps to reduce the spread of germs and virus;
- Logo and program shortcut key printing are available;

### zCover zPrinting Program Shortcut key

**Material:** Silicone Rubber

**Programs:** Apple Final Cut Pro, Adobe Photoshop, Adobe Illustrator, Adobe InDesign, Adobe Dreamweaver, Adobe Flash, Digidesign Pro Tools, Adobe After Effects, Adobe Premiere Pro-Adobe Premiere 6.5, Autodesk AutoCAD, Autodesk Maya, Cakewalk Sonar, Avid Xpress, Sony Vegas, Steinberg Cubase/Nuendo

**Compatibility:** Short Cut Program Keyboard skin for Apple Desktop Keyboard & Apple Wireless Keyboard  
(\* Not compatible with previous Apple Keyboard.)

zCover has created the hardware for your software. Innovating design and quality material production has allowed zCover to make the break through in the production of silicone keyboard covers. Known to zCover as **zPrinting**, zCover is the first one in the industry to be able to successfully print precisely in a numerous colors onto their high-quality silicone. This breakthrough has lead to the unique and innovating collection of **zCover** protective covers. The program short cut covers the newly released **Adobe Creative Suite 3 Design Premium** covers provide the ultimate in keyboard support including: **Adobe Photoshop CS3, InDesign CS3, Illustrator CS3, Flash CS3 and Dreamweaver CS3.**

The exciting zCover technique **zPrinting** allows for endless possibilities allowing the covers applied in numerous roles such as protection, education, marketing and many more.

### zCover TypeOn APKNAU / APKNBU Preprinted series for Apple Notebook Keyboard

**Material:** Silicone Rubber

**Color:** zPrinted Ice Clear, Ice Blue, Ice Green, Ice Pink, Ice Purple, Ice Yellow, Black, Glow-in-Dark-White

**Compatibility:**

**APKNAU** for Apple MacBook Pro, Apple iBook & Apple PowerBook

**APKNBU** for new Apple MacBook

zCover TypeOn pre-printed Language Keyboard protector is unique in having pre-printed letters on the cover, the layout of which perfectly coincides with that of the standard Apple Notebook US English Keyboard. With the protector snugly fitted to your keyboard, you won't be squinting again struggling to find the right key!



### zCover TypeOn APKD for Apple Desktop Keyboard

**Material:** Silicone Rubber

**Compatibility:** for Apple Desktop Keyboard & Apple Wireless Keyboard

(\* Not compatible with previous Apple Keyboard.)



Stop Dirt Dust and Particles

zCover TypeOn Keyboard Protector

Your Keyboard

### zCover iSA Key for Apple Remote

**Cases Material:** top grade silicone rubber

**Case Color(s):** ice clear, blue, black, pink, grey, purple, glow-in-dark white

**All over protection rate: 98%**

**Access to click wheel: Yes,** Integrated ultra thin Click Wheel protective skin

**Lanyard includes in retail pack: Yes**



zCover leads the way in manufacturing a high quality product that is always ready for the ever changing market of technology. Each zCover iSA Key case comes with a zCover lanyard. Our full line of iSA Key cases boast of a state of the art. Multicolour choice gives you a way to identify your Apple Remotes for iPod dock, Apple TV, Mac Mini, Apple laptop or iMac

around your house. You are going to love our glow-in-dark iSA Key. Find it in DARK!

zCover iSA Key for Apple Remote protects almost 100% surface of Apple remote. It was crafted from non-toxic, durable high-grade silicone rubber gives your stylish look and a better protection.



- Side-grip-dots give your Apple Remote a stylish look and a better grip.
- Magnetic adherence function works perfect with Apple Remote in iSA key.
- Removable zCover lanyard, one of the best value add up to iSA Key.
- Integrated Sensitive Ultra-thin Click Wheel Protection Skin. It protects entirely Click Wheel from dust, dirt, moisture, and liquids, only 0.6mm! even thinner than our fingertip skin! This is a great protection feature and it is very sensitive to the touch!



You can clean your cover using warm, soapy water. Lather the silicone cover, rinse thoroughly, pat down extra moisture if desired and allow to air dry.



zCover iSA silicone cases have been nominated by Macworld Awards 2006 as editor's choice in the iPod Accessory Category. As the Only iPod Protection Case that has so far won such a nomination, our iSA series will be the best solution for the iPod and Mac.

**zCOVER**  
fashionable protection cases

**Macworld  
AWARDS  
2007**

**NOMINATION**



zCover Universal Window Clip Stage with zCover gloveOne for the first iTunes Cell Phone

Macbook with zCover Adobe Photoshop Shortcut Key and iSA Key for Apple Remote

**Show Style,  
Enjoy Functionality.**

**A Leading Producer of Silicone Protectors  
Trend-setting Fashionable Cases  
Excellent Protection & Fit  
Extraordinary Durability  
Functionality with Elegance  
Technology with Inspiration**





"NoteBook is a must-have if you're using your computer as a true digital hub."  
Tera Patricks, [Mac360.com](http://Mac360.com)

"NoteBook is now open on my desktop all the time."  
Shawn King, Host/Exec.  
Producer, Your Mac Life

ACTIVATE  
YOUR IDEAS

download a FREE DEMO at  
[www.circusponies.com/demo](http://www.circusponies.com/demo)



CIRCUS PONIES'  
**NOTEBOOK**  
organization for a creative mind

★★★★★  
Macworld UK

MacAddict RATED  
GREAT

Macworld  
★★★★★

NoteBook is available at:  
CompUSA and the Apple Store



## MAC BEAT

### MUSIC

# Microsoft: All Your iPods Belong to Us

Company encourages purging Apple's players

**M**icrosoft may be turning to more-inventive ways to get people to try the Zune MP3 player, its would-be iPod killer. In an article that you can read at [macworld.com/2858](http://macworld.com/2858), IDG News Service's Elizabeth Montalbano reports that the Zune team at Microsoft's headquarters has set up an "iPod Amnesty Bin" where employees can drop in iPods they don't want to use anymore. MSNBC.com employee Rex Sorgatz took a picture of the bin and posted it at the Flickr photo-sharing site.

Whether a morale-boosting joke or a desperate attempt to get someone—anyone—to swap the popular iPod for the less-than-hot-selling Zune, it got us thinking about other exchange programs Microsoft might set up:

- > A program in which Microsoft employees can trade in *The Pirates of Silicon Valley* DVDs for a VHS tape of the cast of *Friends* extolling the virtues of Windows 95.
- > An exchange window where employees can swap dingy old quarters for two shiny new nickels.
- > An amnesty program where Microsoft employees can surrender all their copies of the Steve Ballmer "Developers!" video, no questions asked.
- > An 800 number that open-source-software users can call up to receive a demand for royalty payments from Microsoft's legal department.
- > A mail-in program where frustrated Windows users can turn in older versions of Microsoft's operating system for a version of Mac OS X (Tiger) that will arrive on an installation disc labeled Vista. —PHILIP MICHAELS



## WIDGET OF THE MONTH

### iStat nano

Looking for a simple way to view your Mac's vital stats? iSlayer's iStat nano (payment requested) is a compact and easy-to-read widget that gives you just that. You can quickly view CPU usage, memory usage, disk space, network addresses and traffic, and more ([islayer.com](http://islayer.com)). —DAN FRAKES



### SOFTWARE

**CrossOver Mac 6.1**, from CodeWeavers ([www.codeweavers.com](http://www.codeweavers.com)): This Windows-compatibility program for Intel-based Macs adds the ability for Microsoft Outlook users to work remotely using RPC over HTTP (\$60).

**Skype 2.6 for Mac**, from Skype ([www.skype.com](http://www.skype.com)):

This voice-over-IP communication program adds a Call Transfer feature for transferring an ongoing call to another Skype user over a contact list (free).

PHOTOGRAPH BY REX SORGATZ (FIMOCULOUS.COM)

PRODUCT  
WATCH



A man in a dark suit, white shirt, and patterned tie stands against a vibrant pink background. He is holding a small, silver, rectangular portable storage device in his left hand. The device has the Maxtor logo on it. In the top right corner, a portion of a disco ball is visible.

# I'M A DJ

## A FATHER. A CEO.

And wherever I go, my music, my family photos and my earnings reports go with me. Some might say I have my whole world in the palm of my hand.

### MAXTOR ONETOUCH™ III MINI EDITION

Introducing up to 160GB of portable storage and automated backup that lets you take your digital life on the road, sync data between two or more computers, and keep your files secure with Maxtor DriveLock™ and Encryption.



That's a lot of Good Thinking in a mini package.  
Learn more at [www.MaxtorSolutions.com](http://www.MaxtorSolutions.com)

**Maxtor®**  
GOOD THINKING.™

© 2007 Seagate, Seagate Technology, Maxtor and the Maxtor stylized logo are registered trademarks and Maxtor OneTouch and Maxtor DriveLock are trademarks of Seagate Technology LLC. Other trademarks are the property of their respective holders. Seagate Technology, 300 Disc Drive, Scotts Valley, CA 95066 U.S.A.



## GAMES

# StarCraft II Headed to the Mac and PC

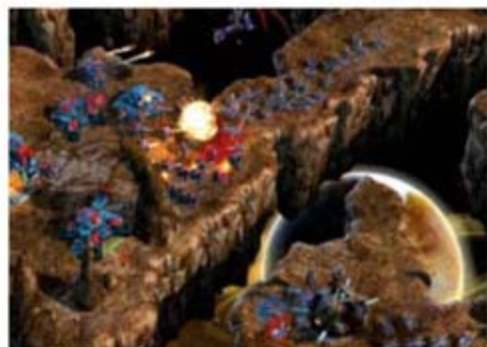
Legendary game slated for release

**S**tarCraft II, the sequel to the legendary game, is in development at Blizzard Entertainment. And unlike with the original game, Mac users won't have to wait while their PC counterparts vie for control of planetary surfaces. The Mac version of StarCraft

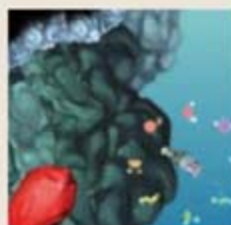
II is expected to come out at the same time as the PC edition.

In StarCraft II, players reprise their roles as leaders of human Marines, vile alien Zerg, or enigmatic alien Protoss battling for interstellar domination. A new 3-D graphics engine, a story line that picks up where StarCraft's Brood War expansion pack left off, new competitive multiplayer features, and full map-making and scripting tools promise to keep avid gamers busy for hours on end.

What's unclear at this point is a release date; Blizzard hasn't announced one. The company says that the game has been in development since late 2004, so it seems likely that StarCraft II is quite far along. —PETER COHEN



## GAME BUZZ



### Aquaria

Ambrosia Software has announced plans to publish a Mac version of Aquaria. The

game was the winner of the grand prize at this year's Independent Game Festival Awards, part of the Game Developers Conference. Aquaria is a side-scrolling underwater action game in which you take control of Naija, who unearths the history of her home and goes on a quest to discover the fate of her people. Naija swims through a massive world teeming with undersea life; encounters hundreds of different plants and animals; and explores hidden caves, lost ruins, and more. Ambrosia hasn't revealed a release date or system requirements for Aquaria, but the company notes that the game will be Universal. —PETER COHEN

## Simply the best external storage solutions for your Mac

But don't take our word for it.

G-Tech's G-DRIVE Q was the 2006 recipient of the coveted Editors' Choice Award from Macworld Magazine and the only hard drive to garner a perfect five-mouse rating. Our mission to provide the best external storage solutions for Macs is simply unmatched in the industry. From the ultra-portable G-DRIVE mini to the super high-performance G-SPEED, every G-Tech storage solution is designed to provide the perfect combination of performance, reliability and style.



Performance. Reliability. Style.

See the full line of G-Tech Products at  
[g-technology.com](http://g-technology.com)



# GRIFFIN



## Journi

Journi's got your soundtrack wrapped up

Compact size. Amazing sound from your iPod® wherever life takes you. "Out there" is calling. Your Journi awaits.



### Amplifi

Tabletop jukebox



### iTrip Auto

Your iPod® on your car stereo

Set your technology free.

[www.griffintechology.com](http://www.griffintechology.com)



# Hot Stuff

What we're raving about this month

## Célesta

I'm a fan of laptop keyboards—not necessarily their size, but their low-profile, scissor-switch keys. Moshi's new \$120 Célesta is a full-size desktop keyboard with a laptop feel—and with an attractive design and good ergonomics, to boot. Available in black with black keys or silver with white keys, the Célesta's sturdy body is made of brushed aluminum. It includes a full complement of Mac-specific keys and two USB ports; a clear-acrylic section

at the top uses LEDs to display the Moshi logo and several indicators (such as Caps-Lock). The Célesta is also among the slimmest keyboards I've seen—it's less than one

inch high at its thickest point. In fact, the front of the keyboard is nearly flush with your desk, so you can use the desk itself as a wrist-rest while maintaining an ergonomic typing position (the keyboard is tilted at a low 9 degrees; you can increase this to 15 degrees, using a flip-out stand on the bottom). An oddly located mute key—between the right-hand option and control keys—is my only real complaint ([www.aevoe.com](http://www.aevoe.com)). —DAN FRANKS



## HomeDock Music Remote

Fans of Digital Lifestyle Outfitters' HomeDock line will be excited by the company's new \$130 HomeDock Music Remote. Connect the HomeDock iPod dock to your stereo (or TV), and you can pump your music player's tunes throughout your house, using a flashy, shiny remote with its own display to control playback. The remote works from as far as 150 feet away, and a Jukebox feature lets you queue as many as ten songs from your library on-the-fly (it's akin to iTunes' Party Shuffle feature). The device works with fourth- and fifth-generation iPods, all iPod nanos, and the iPod mini ([www.dlo.com](http://www.dlo.com)). —DAN MOREN



## DataTraveler Reader

There are plenty of SD card readers in the world. But Kingston Technology's sleek, \$35 DataTraveler Reader also doubles as a 2GB USB 2.0 flash drive, so you can get photos off your camera and keep them backed up with the same device. The DataTraveler Reader supports MMC, SD, and SDHC cards. And because the flash drive and memory card show up in the

Finder as separate devices, it's easy to transfer files from one medium to the other ([www.kingston.com](http://www.kingston.com)). —KELLY TURNER



## Jack OS X 0.74

What makes multitrack audio editing great is the fact that it lets you deal with each instrument or voice separately, without affecting the others. That's what makes the free Jack OS X so cool. It's a low-latency audio server that lets you add virtual ports to your audio programs, giving you the ability to configure software such as Apple's Logic or GarageBand to use, say, 16 ports instead of the two ports available with the default Mac setup. So what can you do with 16 ports? I regularly use Jack to record each part of a virtual drum kit on its own channel in Logic, giving me complete editing freedom ([www.jackosx.com](http://www.jackosx.com)). —JIM DALRYMPLE

## Trey

Gaming chairs have been around for a while, but they're rarely well suited to general office work. Sauder Manufacturing believes that it has found a balance between the two in a new offering called Trey, which comes in various colors (\$239 when clad in fabric, or \$269 in faux leather). At first glance, Trey looks like a normal desk chair. It rests on a telescoping base that adjusts for height and swivels 360 degrees, and it offers tilt and tilt-lock controls. But a release latch lets you pull the seat off the stand, and the seat and back frame then become a stand-alone floor rocker-style chair (popular among gamers). Two built-in rails provide balance. When the seat is detached from the base, you can rest it on the floor and use it as a rocker to watch TV or play video games, while using the base as a stand for refreshments, for example, or as a place to put your laptop ([www.treychair.com](http://www.treychair.com)). —PETER COHEN





# Live Life Loud™



## iHome™

Rock and roll out of bed with your iH8 iPod® alarm clock radio. From your first stretch to your last yawn, groove to your favorite tunes. Your iPod® powers up on the one-size-fits-all charging dock, while the clear Reson8™ speakers take your music to a higher level. Sounds like another beautiful day.

))) **The world's #1 producer of  
clock radios for the iPod**

Check out the entire line at [www.ihomeaudio.com](http://www.ihomeaudio.com)



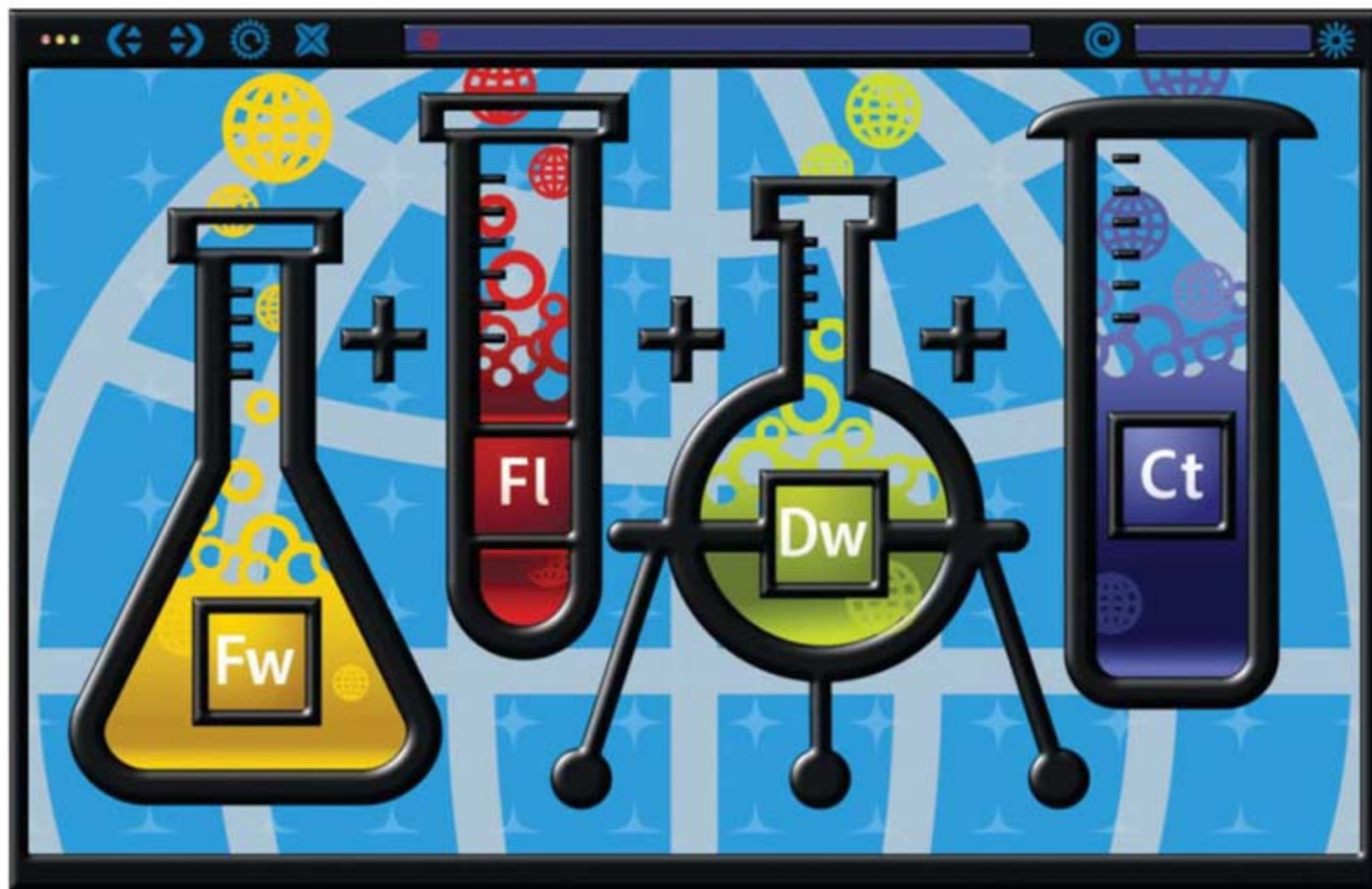
Available at:

Apple Store  Brookstone®  RadioShack.

iHome and its products are trademarks of SDI Technologies, Inc. iPod® is a trademark of Apple Inc., registered in the U.S. and other countries.



# Reviews



## Elements of Web Design

Adobe features Macromedia's Web tools in the CS3 package

**A**dobe is currently releasing a massive suite of print, Web, and video-production programs under the rubric of Creative Suite 3. Adobe CS3 is designed to be a complete set of tools for every type of Mac-based creative professional, with specialties for print, Web, and video. Last month, we reviewed the major CS3 design applications—Photoshop, Illustrator, InDesign, and Acrobat, as well as the new Photoshop CS3 Extended. This month, we turn our attention to the Web design programs: Dreamweaver, Fireworks, Flash, and Contribute, all formerly Macromedia programs.

Like the design programs, the Web applications are Intel native and are available in several bundles, including Web Standard (\$999), Web Premium (\$1,599), and Master Collection (\$2,499). They're also available as stand-alone programs. While Adobe has tried to assemble all of these titles under a uniform interface, some Macromedia applications still retain much of their original identity—a relief to longtime users. Stay tuned for our reviews of the new Production Premium—Premiere Pro CS3, After Effects CS3 Professional, and Soundbooth CS3—in a subsequent issue.

**Find It Online** Longer reviews of these products are available on our Web site at the following addresses:



**Dreamweaver CS3**  
[macworld.com/2763](http://macworld.com/2763)



**Fireworks CS3**  
[macworld.com/2765](http://macworld.com/2765)



**Flash CS3 Professional**  
[macworld.com/2764](http://macworld.com/2764)



**Contribute CS3**  
[macworld.com/2766](http://macworld.com/2766)



ILLUSTRATION BY GLENN MITSUI



# Dreamweaver CS3

Innovative tools and integration fortify upgrade **BY DAVID SAWYER MCFARLAND**

**D**reamweaver has always been a solid tool for creating and maintaining Web sites. The latest version builds on this powerful product by adding support for Intel processors, integration with Photoshop CS3 (; [macworld.com/2757](http://macworld.com/2757)), and tools that simplify CSS (Cascading Style Sheets) design. It also expands into new territory by adding the Spry Framework for Ajax, a combination of technologies that include JavaScript, CSS, and HTML for building interactive user interfaces.

## Universal at Last

Dreamweaver CS3 is the first version of the program to appear with the Adobe name; it's also the first version to run natively on Intel Macs. Running on an Intel Mac, Dreamweaver CS3 is more responsive than Dreamweaver 8 (; [macworld.com/0936](http://macworld.com/0936)) running in Rosetta: startup time is faster; typing feels quicker; and sitewide operations, such as updating templates and broken links, are speedier.

## The Long and Winding Road

Dreamweaver CS3 has the same user interface as Dreamweaver 8 (this may be welcome news for longtime users who are accustomed to the Macromedia style). And Dreamweaver CS3 provides helpful integration with Photoshop CS3, offering a streamlined workflow for getting images from Photoshop into Dreamweaver. You can now copy a layer, a selection, or a slice from Photoshop and paste it directly into Dreamweaver. You can even drag a Photoshop file directly onto a Dreamweaver page. A new image-optimization window lets you apply compression settings in the program; the optimized image then appears on the Web page.

Dreamweaver CS3 also remembers the location of the original Photoshop PSD document so you can edit it for your Web page—but only if you're

using Photoshop CS3.

This version of Dreamweaver includes Adobe's new Device Central. This program (which integrates with several other programs in the suite) shows how mobile devices display Web content. You can preview a Dreamweaver page in more than 200 mobile-device profiles; each profile simulates the display of a particular phone—but is accurate only for phones that use the Opera Mini browser.

## The New Web

One of the most significant additions to Dreamweaver is a set of tools for adding interactive elements to a Web page. Based on the Spry framework, these new tools go far beyond the eye candy of Dreamweaver's old time-line animations, and they're a significant improvement on the simplistic JavaScript produced by Dreamweaver 8's behaviors. Spry widgets—prebuilt blocks of code that you can insert into your pages—add helpful user-interface elements to a page; the Spry Menu Bar widget, for example, is a navigation bar that supports two levels of pop-up menus—the perfect way to cram a lot of links into a compact space. Form-validation widgets are coded to ensure that data is submitted correctly. Several other page widgets make it easy to present a lot of content in a small space; for example, the Tabbed Panels widget lets you place content into sepa-



**Working with Widgets** Spry widgets let you display lots of page content in a compact space—like the tabbed panels pictured here.

rate tabbed areas, each of which is revealed by clicking on a tab (see “Working with Widgets”).

For people who do like eye candy, you can draw attention to your Web pages with Spry effects that fade out, shrink, grow, or shake an image or other page content. The Spry Data Set feature lets you take data from an XML file and display it in a table. People viewing the Web page can sort the table by clicking on column headers,

## Dreamweaver CS3



**PROS:** Spry Framework for Ajax now included for enhanced site interactivity; Photoshop integration; easy-to-use CSS layouts.

**CONS:** Server behaviors and database tools need updating.

**OS X COMPATIBILITY:** 10.4 (Tiger)

**PROCESSOR COMPATIBILITY:** Universal

**PRICE:** \$399; upgrade from version 8, MX 2004, and MX, \$199

**COMPANY:** Adobe Systems, [www.adobe.com](http://www.adobe.com)



and they can even see detailed information about one item—all without downloading a new page from the Web server.

### Solving CSS Woes

CSS is a Web designer's main tool for creating beautiful and functional Web sites that adhere to proper Web-coding standards. Unfortunately, CSS is also a confusing technology, and creating Web pages that look and work the same on Windows machines and Macs, and in various browsers, is often difficult. Dreamweaver CS3 adds two new features—CSS layouts and the Check Browser Compatibility feature—that cut down on trial-and-error.

CSS layouts contain the basic HTML and CSS necessary to create the most common page layouts, and they offer more options than the ones in Dreamweaver 8. Dreamweaver CSS layouts include all the necessary workarounds to make designs function well in all current Web browsers. The new Check Browser Compatibility feature scans a Web page for code that might not work correctly in a particular browser.

### Getting Old

Dreamweaver CS3 doesn't offer any changes to the server-side tools that have made this application a favorite for designers who want Web sites that can interact with databases. It still doesn't have commands for solving common server-side problems such as uploading files, sending e-mail, and visual SQL (database) query generation.

### Macworld's Buying Advice

With its accurate visual design, strong site-management features, and excellent CSS tools, Dreamweaver continues to be the premier Web design program. If you use an Intel Mac, are trying to ease the frustration of building CSS-based Web layouts, or want to add user-interface controls, Dreamweaver CS3 is a worthy upgrade.

**David Sawyer McFarland** is a Web consultant and the author of *Dreamweaver 8: The Missing Manual* (O'Reilly, 2006).

# Fireworks CS3

Designing sites is easier than ever **BY CYNDY CASHMAN**

**A**dobe's first release of Fireworks as part of its CS3 suite of Web design programs includes many new features that will please graphic artists and Web developers.

Fireworks' new Pages panel makes it easy to create working prototypes of Web sites containing multiple pages, hyperlinks, hotspots, and rollover graphics within a single Fireworks file.

New hierarchical layers provide integration between Fireworks, Illustrator CS3 (★★★★; [macworld.com/2760](http://macworld.com/2760)), and Photoshop. The new Create Slideshow command—with its templates—is another welcome new feature.

The addition of 9-slice (or intelligent) scaling solves the problem of distortion when scaling an object. It lets you specify which parts of a bitmap or vector symbol you want to scale and which parts you want to preserve.

You can also now select an image and use the Copy command in Fireworks and the Paste command in Dreamweaver (★★★★; page 35) to copy an image to a Web page. This method is more efficient than before. The new Common Library feature lets you create and store symbols—including button, graphic, and animation symbols—that you can add to any image.

Creative enhancements in Fireworks CS3 include a Color Palette for blending custom colors and Photoshop blend modes. The new Photoshop Live Effects dialog box allows you to add and edit Photoshop effects within Fireworks, though with less control than in Photoshop. The Extrude Paths tool is a helpful addition for creating simple 3-D objects.

Importing or opening Illustrator or Photoshop files in Fireworks CS3 isn't perfect. For example, Fireworks will convert

### Fireworks CS3



**PROS:** Pages panel aids in prototyping; helpful hierarchical layers; intelligent scaling allows more control; Photoshop Live Effects gives you access to Photoshop effects.

**CONS:** Imported Photoshop files do not always maintain their layers.

**OS X COMPATIBILITY:** 10.4 (Tiger)

**PROCESSOR COMPATIBILITY:** Universal

**PRICE:** \$299; upgrade from Version 8, MX 2004, or MX, \$149

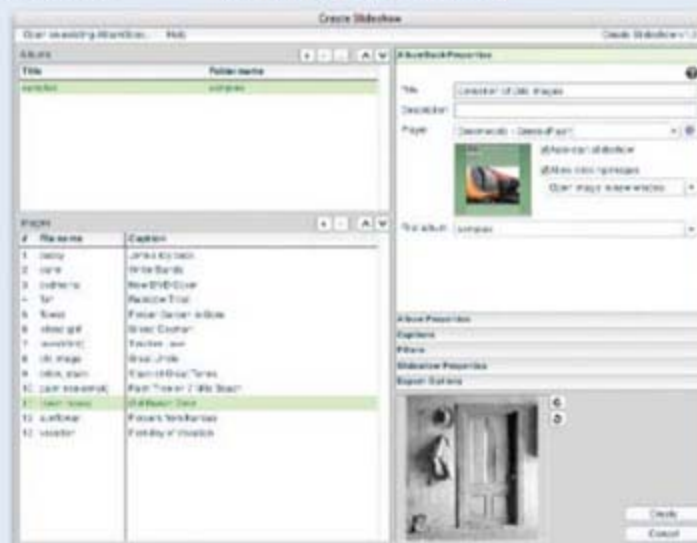
**COMPANY:** Adobe Systems, [www.adobe.com](http://www.adobe.com)

a 16-bit RGB Photoshop file to a single-layer bitmap rather than maintaining its hierarchical layers. Opening and resaving the file as an 8-bit RGB Photoshop image before importing or opening it in Fireworks prevents this.

### Macworld's Buying Advice

Fireworks CS3 is the most ambitious upgrade to this program to date. The new Pages panel, improved integration with other Adobe CS3 applications, and the addition of intelligent scaling are reasons enough to upgrade.

**Cyndy Cashman** teaches Adobe Fireworks, Dreamweaver, Flash, Photoshop, and Illustrator at her company, Breakaway Interactive ([www.breakawayinteractive.com](http://www.breakawayinteractive.com)).



**Slick Slide Show** Create a Flash- or Spry-based slide show, complete with captions, using the new Create Slideshow dialog box.



A pair of Vibe duo earbuds with black and silver finishes and white ear tips. The earbuds are connected by a black braided cable. One end of the cable features a 3.5mm gold-plated jack, and the other end has a silver V-moda branded inline remote and a 3.5mm jack. The entire setup is reflected on a dark, glossy surface.

introducing  
**vibeduo**

**v-moda**

for mp3 +  
iPhone



Vibe duo available at Apple Store and [v-moda.com](http://v-moda.com)

visit [v-moda.com](http://v-moda.com)



# Flash CS3 Professional

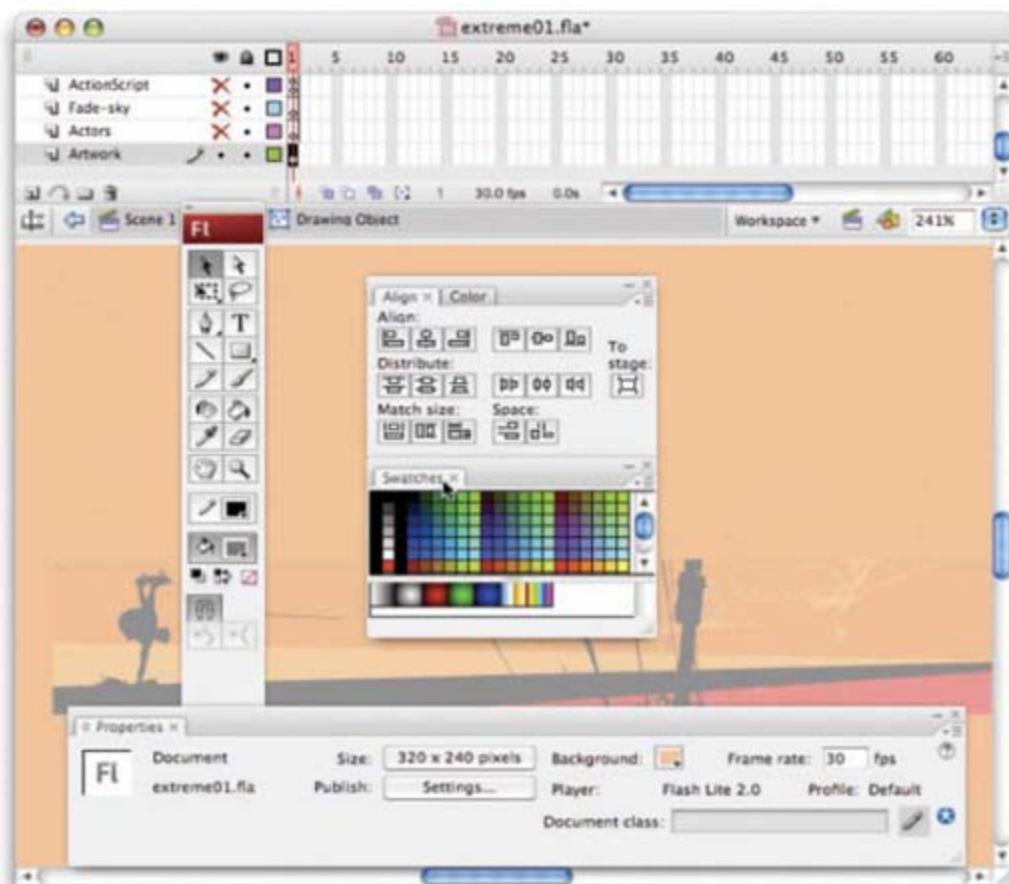
Remarkable integration with Adobe's CS3 family **BY DAVID KARLINS**

**F**lash CS3 Professional, the first version of Flash released under Adobe's aegis, is arguably the most dramatically enhanced program in the new CS3 suite. Flash has two interacting components: ActionScript, Flash's powerful programming language, and the timeline-based stage, Flash's unique design environment for generating vector-based (scalable) animation. The most exciting new features in this release are on the design side, along with some fine-tuning in the coding environment.

## Interface Update

In Flash CS3, Adobe unveils a revamped interface, with features like object alignment, color, swatches, and scaling, all accessible through Illustrator-, Photoshop-, and InDesign-style panels. The Flash Tools panel shares icons and even keyboard shortcuts with its CS3 cousins, Photoshop and Illustrator. Other interface improvements include the ability to use your mouse's scroll wheel to scan through sets of layers in the timeline, and the ability to create tabbed panels.

Perhaps the most radical innovation in Flash CS3 is the vastly improved integration with Illustrator CS3. When competitors Macromedia and Adobe published Flash and Illustrator, respectively, the programs were



**Work Space** Flash CS3 features a Tools panel, tabbed and stackable panels, and a Property inspector to create an inviting working environment for designers.

## Flash CS3 Professional



**PROS:** Improved design tools and accessibility for Photoshop and Illustrator users; enhanced integration with Illustrator and Fireworks; powerful preview tools for creating mobile-device interfaces; ships with Flash Video Encoder.

**CONS:** Standardized CS3 panels make learning curve easier, but creating Flash animation still requires study; expensive.

**OS X COMPATIBILITY:** 10.4 (Tiger)

**PROCESSOR COMPATIBILITY:** Universal

**PRICE:** \$699; upgrade from Flash MX, Flash MX 2004, Flash MX Professional 2004, Flash Basic 8, and Flash Professional 8, \$199

**COMPANY:** Adobe Systems,  
[www.adobe.com](http://www.adobe.com)

estranged cousins, sharing the ability to create scalable, vector-based graphics, but not communicating with each other very well. Importing vector drawings from Illustrator into Flash was a clunky chore, with many elements of Illustrator artwork getting lost in the process. Now Illustrator and Flash are kissing cousins. Flash CS3 incorporates Illustrator's powerful Pen tool for drawing and editing curves. And, most significantly, you can now copy and paste directly from Illustrator into Flash or open Illustrator files in Flash—capabilities that will enable a much more efficient animation workflow.

Now, when Flash imports Illustrator artwork, it recognizes and preserves an impressive set of attributes, including layers, groups, symbols, anchor-point placements, gradients, and some effects (such as drop shadows). Clipping masks from Illustrator CS3 are maintained in Flash CS3, along with

opacity (transparency) settings. Symbols are vector graphic objects that can spawn instances—additional generated artwork based on the original symbol that retains its basic characteristics. You can customize symbols to quickly populate a screen with graphic objects. And you can import Illustrator type into Flash as editable text, vector outlines, bitmap graphics, or a Flash movie clip.

The integration between Illustrator and Flash is, at this point, mostly a one-way street. In CS3, Adobe has focused more attention on making it possible to smoothly move Illustrator artwork into Flash: a typical animation workflow involves drawing illustrations in Illustrator, and programming and animating in Flash. Moving Flash artwork to Illustrator is less reliable, and I observed some glitches in vector artwork copied from Flash to Illustrator. The most advanced implementation of Illustrator-to-Flash workflow is the abil-



ity to create a symbol in Illustrator (such as a button) and then save it as a Flash movie clip.

With CS3, Adobe has introduced the ability to preview 9-slice scaling for vector graphics in Flash and to define 9-slice scaling in Illustrator CS3 and Fireworks CS3 (🔧🔧🔧; page 36). The 9-slice-scaling feature refers to a grid that you can superimpose over an object (a button, for example) that regulates how the object is scaled—vertically only, horizontally only, vertically and horizontally, or not at all. The 9-slice scaling that you define in Illustrator or Fireworks is now preserved when you copy and paste a symbol into Flash. This new capability could create improvements in workflow.

### Encoding Flash Video

The Flash Video Encoder, packaged with Flash CS3, allows developers to convert video from Apple's QuickTime format to FLV (Flash Video) format. The Flash Video Encoder has a handy set of video-editing tools built in, including the ability to crop and resize video during the conversion process. And digital video developers using Apple's Final Cut Pro (🔧🔧🔧; [macworld.com/2903](http://macworld.com/2903)) can encode to FLV format directly from that program.

### Macworld's Buying Advice

Flash CS3 Professional includes innovative new features for designers, particularly its integration with Illustrator CS3. The ability to import (or paste) Illustrator vector graphics into Flash is a major event in the evolution of animation design, and the ability to import Illustrator graphic symbols has the potential to radically improve animation workflow. The coding enhancements in this version are less radical, but there is something for everyone in this impressive Flash upgrade.

**David Karlins** is the author of the *Complete Idiot's Guide to Flash 5* (Alpha, 2000), and 20 other books on graphic and interactive Web design, including *Adobe Dreamweaver CS3 How-Tos: 100 Essential Techniques* (Adobe Press, 2007) and *Adobe Illustrator CS3 How-Tos: 100 Essential Techniques* (Adobe Press, 2007).

# Contribute CS3

Nondesigners' Web page editor joins CS3 **BY TOM NEGRINO**

**A**dobe Contribute CS3 is unusual in that it allows you to edit existing Web pages, and even create new Web pages from templates—but you can't use it to create a new site from scratch. Contribute doesn't let users access a site's code. It allows them to change or add to a site's content—without the risk that they will accidentally break something.

Contribute CS3 is at first glance a fairly small revision of the previous version, Contribute 4 (🔧🔧🔧; [macworld.com/2307](http://macworld.com/2307)). The most significant changes in this upgrade take place behind the scenes, and they markedly improve performance. Contribute is now Universal, so it's much faster on Intel Macs, and common tasks feel more responsive on all Macs.

Contribute CS3 has Dreamweaver CS3's improved page-rendering engine, so it displays CSS on Web pages faster and with much better fidelity.

Contribute has always let you insert images, Flash animations, and video from your computer or your own Web server onto Web pages, but Contribute CS3 lets you insert these elements from anywhere on the Internet. Inserting an item adds a reference to it on your page, so it appears without your having to upload it to your server. New integra-



**Flash Video** Contribute CS3 makes it easy to add page elements that reside elsewhere on the Internet, such as this Flash video, to your pages.

tion with Adobe Bridge CS3 lets you use Bridge to drag and drop images and other media onto your pages. Another new feature allows you to quickly add bits of HTML—called *snippets* in the program—to a page.

Unfortunately, the Windows version has features that are still missing from the Mac version, including easy incorporation of Microsoft Office documents and a useful editing toolbar that is available for Firefox, but not Safari.

Contribute CS3 brings some welcome refinements to the program's blog-editing features. It's now easier to select a previous post for editing and to delete posts. Blog editing is now WYSIWYG, and the program caches your blog's template so you can write entries when you're offline. And you can now assign multiple categories to a post.

### Macworld's Buying Advice

Contribute CS3 is an appealing upgrade to Contribute 3 and earlier versions, especially for people with Intel Macs. It's the upgrade that Contribute 4 should have been, and Adobe should have rewarded users who upgraded to Contribute 4 with a free upgrade. ✖

**Tom Negrino** has written many books on Dreamweaver and Contribute, including *Dreamweaver CS3 for Windows and Macintosh: Visual QuickStart Guide* (Peachpit Press, 2007).

### Contribute CS3



**PROS:** Improved editing features; general speed improvements.

**CONS:** Some features still available only in PC version; unfairly expensive upgrade pricing from previous version.

**OS X COMPATIBILITY:** 10.4 (Tiger)

**PROCESSOR COMPATIBILITY:** Universal

**PRICE:** \$149; upgrade from any previous version, \$79

**COMPANY:** Adobe Systems, [www.adobe.com](http://www.adobe.com)



# MacBooks Trade Up

Modest update comes with impressive speed gains **BY HENRY NORR**



Since its debut in May 2006, the MacBook family has earned a place in the pantheon of Apple's all-time greatest hits. The sturdy, Intel-powered notebooks have been so popular with consumers, especially students, that they've helped the company nearly double its laptop sales over the last year and grab close to 10 percent of the U.S. retail market.

The latest enhancements to the line aren't spectacular, but they're sure to solidify the MacBook's status as a market leader. All three models—still

weighing in at 5.1 pounds, and still priced at \$1,099, \$1,299, and \$1,499—have slightly faster processors and higher-capacity hard drives.

These MacBooks come with the same rich set of standard features as before. As in the previous versions, the base model is outfitted with a Combo (CD-RW/DVD-ROM) optical drive, while the two higher-priced notebooks include an 8x SuperDrive with double-layer support.

All three models now come with full, out-of-the-box support for 802.11n, the latest flavor of Wi-Fi wireless networking, which offers twice the range and up to five times the throughput of the previous standard, 802.11g.

## Macworld Lab Test

Speedmark 4.5 Test Results

13-inch MacBook Core 2 Duo/2.16GHz (black)	202
13-inch MacBook Core 2 Duo/2.16GHz (white)	195
13-inch MacBook Core 2 Duo/2GHz	192
13-inch MacBook Core 2 Duo/1.83GHz (white, Nov. 2006)	169
15-inch MacBook Pro Core 2 Duo/2.33GHz	223

Longer is better. Reference systems are in *italics*. Speedmark 4.5 scores are relative to those of a 1.25GHz Mac mini, which is assigned a score of 100. All systems were running Mac OS X 10.4.9, with 1GB of RAM and with processor performance set to Highest in the Energy Saver preference pane when applicable.—MACWORLD LAB TESTING BY JAMES GALBRAITH AND BRIAN CHEN

For complete benchmark test results, please visit [macworld.com/](http://macworld.com/)

**2859**

### Top to Bottom

The \$1,499 MacBook, with its handsome black enclosure, now includes a 2.16GHz version of Intel's Core 2 Duo processor, compared to the previous 2GHz Core 2 Duo, and it comes with a 160GB hard drive, up from 120GB.

As for the \$1,299 white model, it now has a 2.16GHz Core 2 Duo chip, up from 2GHz, and its hard drive has grown from 80GB to 120GB. And the \$1,099 white model, which previously came equipped with a 1.83GHz version of the Core 2 Duo and a 60GB hard drive, now sports a 2GHz processor and an 80GB drive.

The biggest winner in this refreshed lineup is probably the entry-level model. In its previous iteration, with only 2MB of L2 cache and 512MB of RAM in the standard configuration, it felt slightly sluggish, at least to me, compared to the other two models. That's no longer true. In Macworld Lab's Speedmark 4.5 benchmark tests, the new \$1,099 model scored 192—a performance increase of 13.6 percent over the discontinued 1.83GHz model's score.

### Macworld's Buying Advice

With more cache and system memory as well as a larger hard drive, the \$1,099 MacBook is noticeably snappier than its predecessor, and not significantly slower than its higher-priced siblings. Still, if you can afford to pay an additional \$200, my recommendation is to opt for the midrange model: its SuperDrive and roomier hard drive are sure to come in handy sooner or later—sooner if you're into digital music, photos, and video.

As for the \$1,499 black model, it sure looks classy, but I've found that handprints can mar its elegance. You'll have to decide if the cachet of owning a black Mac laptop—and the larger hard drive—is worth the extra expense. ❌

Henry Norr is a veteran Mac technology writer based in Berkeley, California.

### 13-Inch MacBooks



**PROS:** Slightly faster CPUs; larger hard drives; 802.11n wireless capabilities; sturdy but elegant designs; great glossy screens; built-in AirPort Extreme and Bluetooth; integrated iSight cameras; good battery life; 2.16GHz models offer 8x SuperDrives.

**CONS:** Mediocre graphics performance limits appeal for gaming; no expansion-card slot; black MacBook enclosure easily marred by fingerprints; no SuperDrive in 2GHz model.

**PRICE:** 2GHz, \$1,099; 2.16GHz, \$1,299; 2.16GHz (black), \$1,499

**COMPANY:** Apple, [www.apple.com](http://www.apple.com)

**MORE INFO:** [macworld.com/2859](http://macworld.com/2859)





CDW has everything to concept, collaborate and create.  
Well, except the great ideas.



#### Adobe Creative Suite® 3 Design Premium

- Work with full new versions of Adobe's professional design tools for page layout, image editing, illustration and Adobe PDF workflows
- Utilize new tools for producing engaging Websites, interactive experiences and mobile content
- Experience tight integration for maximum productivity
- Get everything you need to design for tomorrow as well as today



Upgrade from Creative Suite Standard/Premium or Studio	\$614.99	CDW 1153123
Upgrade from Design Premium Group <sup>1</sup>	\$1659.99	CDW 1153122
Full version	\$1865.99	CDW 1153121

#### Apple® MacBook™ Pro

- Intel® Core™ 2 Duo Processor (2.16GHz)
- Memory: 1GB
- SuperDrive™ (DVD±RW/CD-RW)
- Built-in AirPort® Extreme, Bluetooth® and iSight™ camera
- 15.4" widescreen display

\$1999 CDW 1073990



#### Apple Cinema HD Display®

- 23" digital LCD
- Narrow bezel for virtually seamless multi-display arrangements
- One-year limited parts, labor and backlight warranty

\$999 CDW 659614



#### We're there with the Mac solutions you need.

You'd like to spend as much time as possible focusing on your creative work. We're there with the solutions that let you do just that. Our account managers can help you find the products you need to keep the creative process going faster and more efficiently. So call today for detailed answers to all your technology questions, and get back to focusing on what you really enjoy: creativity.

[CDW.com](http://CDW.com) | 800.ALL.MACS



The Right Technology. Right Away.™

<sup>1</sup>Includes Adobe InDesign CS3, Adobe Acrobat 8 Professional, Adobe Illustrator CS3, Adobe Photoshop CS3 Extended, Adobe Flash CS3 Professional and Adobe Dreamweaver CS3. Offer subject to CDW's standard terms and conditions of sale, available at [CDW.com](http://CDW.com). ©2007 CDW Corporation



# macworld.com/reviews

What we're reviewing online this month

## SOFTWARE



### FotoMagico 2 Pro △

**RATING:** **PRICE:** \$129 **COMPANY:** Boinx

Software **URL:** [www.boinx.com](http://www.boinx.com)

FotoMagico 2.0.1 Pro is a powerful slide-show-authoring tool. Its intuitive interface and high level of motion, text, and audio control let you quickly create a viewing experience complete with ambience and anticipation. It interfaces with iTunes, so you can easily add music to your slide show, and it supports a number of exporting formats. However, the trade-off for real-time rendering and high-quality images is a stiff hardware requirement—you'll want at least a G5 or an Intel Core Duo Mac. If you create a lot of slide shows and want the ability to add text and audio, you'll be hard-pressed to find a more elegant and intuitive slide-show package ([macworld.com/2833](http://macworld.com/2833)).

### Google Desktop

**RATING:** **PRICE:** free **COMPANY:** Google

URL: [www.google.com](http://www.google.com)

Google has decided to bring its search expertise to the Mac, and the initial release of Google Desktop shows some promise. Like Apple's Spotlight, Google Desktop builds an index of your files. When you summon Google Desktop's floating window and enter a

query, the search results are displayed in a drop-down list below the query field. The software is somewhat snappier at displaying results than Spotlight, but the top results seem less specific, and the program is a memory hog. If you're a power user who is dissatisfied with Spotlight's lack of speed and difficulty with complex, Boolean-style searches, Google Desktop may be an improvement. But don't expect the almost magical results we've come to know and love from Google's Web search utility ([macworld.com/2748](http://macworld.com/2748)).



### iSale 4.1 △

**RATING:** **PRICE:** \$40 **COMPANY:** Equinix

URL: [www.equinix.com](http://www.equinix.com)

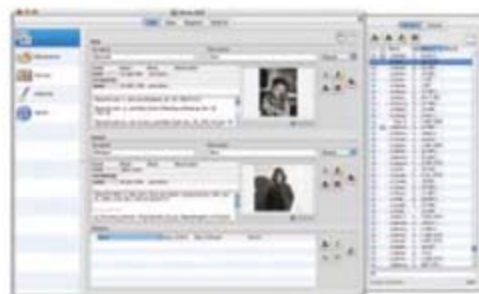
Equinix's iSale 4.1 distills the complexity of setting up an eBay auction into a familiar and intuitive interface. The program integrates with Apple's Spotlight, iCal, Dashboard, and iPhoto, as well as the iSight camera, and it's easy to learn. It helpfully keeps track of the different types of eBay fees that are associated with listing an auction, and it can provide you with a cost analysis before uploading your auction. iSale is good for beginning to intermediate eBay sellers, but high-volume sellers may find that its bulk-processing limitations slow down the listing process ([macworld.com/2832](http://macworld.com/2832)).

### MacFamilyTree 4.4

**RATING:** **PRICE:** \$49 **COMPANY:** OnlyMac

Software **URL:** [www.onlymac.de](http://www.onlymac.de)

MacFamilyTree 4.4.6 is a genealogy program that takes full advantage of



your Mac—allowing you to use your iSight for capturing video clips and photos, as well as your built-in mike for capturing audio of your relatives. The program also makes it easy to use images you have stored in your iPhoto library. Once you create a new family member, you can add events—such as a marriage, a divorce, a birth, or an adoption—to your relative's data file. The program also has several unique reporting features, such as a way to visually pinpoint your family's country of origin. It's not as polished as other genealogy programs on the market, but it makes excellent use of your Mac's built-in tools ([macworld.com/2835](http://macworld.com/2835)).



### Mystery of Shark Island △

**RATING:** **PRICE:** \$20 **COMPANY:** PlayFirst

URL: [www.playfirst.com](http://www.playfirst.com)

In the game Mystery of Shark Island, you're an island castaway. You've awakened on a beach, next to a stone box engraved with a set of odd carvings. As the ocean waves lap at the beach, they bring all sorts of material—fragments of shells, stones, driftwood, seahorses, sea urchins, and more. With each wave, the box opens to reveal the items you need to find—before the timer counts down. It's a fun puzzle game, although the

**FIND IT ONLINE** For expanded reviews, type the blue URL at the end of each summary into your browser's address window.





variety of objects you have to locate is extensive at the beginning of the game and tapers off midway through. Still, it's an addictive game that will test your visual acuity and make you feel as though you've spent a day at the beach ([macworld.com/2834](http://macworld.com/2834)).

## HARDWARE

### C6000dn

**RATING:**  **PRICE:** \$850 **COMPANY:** Oki Data **URL:** [www.okidata.com](http://www.okidata.com)

The more color laser printers come down in price, the more popular they get. Now even high-end features like built-in automatic duplex printing and 10/100BaseT Ethernet networking are becoming standard on some color lasers under \$1,000, such as Oki Data's C6000dn. It offers crisp black text, quick print speeds, and a paper-saving double-sided printing feature, but the C6000dn's graphics printing capabilities could use a little work. If most of your print jobs are multiple-page, text-heavy documents, this Oki is definitely a worthy contender ([macworld.com/2839](http://macworld.com/2839)).

### CanoScan 8600F

**RATING:**  **PRICE:** \$180 **COMPANY:** Canon **URL:** [www.canonusa.com](http://www.canonusa.com)  
What used to be considered high-end



features, such as transparency scanning, 4,800-dpi optical resolution at 48 bits, a full complement of bundled software, advanced controls, and lightning-fast speeds, are standard in this very affordable scanner package. For people who have yet to bring their old photos into the digital realm, this high-quality desktop photo and film scanner is definitely worth a look. Although it was a little slow to warm up, and its photo scans were a touch dark, the CanoScan 8600F proved to be a very good all-around scanner ([macworld.com/2836](http://macworld.com/2836)).

### iDisguise

**RATING:**  **PRICE:** \$10 **COMPANY:** iDisguise

**URL:** [www.idisguise.com](http://www.idisguise.com)  
Looking like a small tin of mints—complete with realistic nutritional information on the back—the iDisguise provides a snug, foam-lined compartment designed for a first- or second-generation iPod



nano. Its goal is to keep your iPod safe by disguising it from thieves. The idea is clever, and it certainly beats leaving your iPod lying around in the open—unless, of course, you've got sugar-craving coworkers who are more likely to swipe your mints than your iPod. You could always make a similar container of your own, but \$10 is hardly an outrageous price to pay to keep your nano safe ([macworld.com/2841](http://macworld.com/2841)).



### iYiYi

**RATING:**  **PRICE:** \$300 **COMPANY:** Tivoli Audio **URL:** [www.tivoliaudio.com](http://www.tivoliaudio.com)

Desktop iPod speaker systems have come a long way since Bose's SoundDock was released in 2005. The iYiYi is one of the better systems out there, thanks to good sound quality, an extensive feature set, a stellar FM radio, an impressive wireless remote, and a sturdy design. If your budget can handle it, the iYiYi is worth considering, particularly if you also like to listen to the radio ([macworld.com/2842](http://macworld.com/2842)).

## Creative Writing Software

### Journler 2.5

**RATING:**  **PRICE:** free **COMPANY:** Philip Dow **URL:** [www.journler.com](http://www.journler.com)

In many ways, Journler 2.5.2 is like an iLife program for your writing. It allows you to link the resources you need for writing and for inspiration—photos, Web links, e-mails, video, audio, and other documents—and lets you organize these files around written entries, which Journler then indexes for searching purposes. It's a great tool for connecting and organizing your thoughts and ideas. Whether you need it to keep a daily blog, record project notes, or write a novel, Journler is a meaty tool for Mac owners who love to write ([macworld.com/2844](http://macworld.com/2844)).



### Ulysses 1.5

**RATING:**  **PRICE:** €80 (about \$105) **COMPANY:** The Blue Technologies Group **URL:** [www.blue-tec.com](http://www.blue-tec.com)

Ulysses 1.5 combines the simplicity of a text editor with powerful project-management functions. It creates projects, which are bundles containing one or several documents. The program includes an optional full-screen mode, which can be extremely handy for avoiding distractions. Ulysses is aimed at creative writers and journalists who regularly work with text alone and don't necessarily need any formatting features. Although the software seems expensive when compared to similar titles, it's a fine and mature program ([macworld.com/2843](http://macworld.com/2843)).



### MultiSync LCD2690WUXiSV

**RATING:**  **PRICE:** \$2,000 **COMPANY:** NEC **URL:** [www.necdisplay.com](http://www.necdisplay.com)

The NEC MultiSync LCD2690WUXiSV is a 26-inch wide-screen LCD monitor that includes a colorimeter, a programmable 12-bit color lookup table for smooth color transitions and gradients, the ability to display up to 94 percent of the Adobe RGB color space, and X-light Pro technology for keeping brightness and color consistent over the life of the display. It carries a high-end price tag, but this feature-packed monitor is a tool that every serious color geek should consider ([macworld.com/2837](http://macworld.com/2837)).





# Top Products

Your guide to the best hardware we've tested. See more at [macworld.com/reviews](http://macworld.com/reviews).

## PRINTERS

### LASER PRINTER C6100dn

RATING: 

PRICE: \$1,102

COMPANY: Oki Data

URL: [www.okidata.com](http://www.okidata.com)



The C6100dn, from Oki Data, produces great-looking prints, and it includes built-in duplexing. It has easy network connectivity and quick printing speeds ([macworld.com/1670](http://macworld.com/1670)).

### INK-JET PHOTO PRINTER

#### Pixma iP6700D

RATING: 

PRICE: \$180

COMPANY: Canon

URL: [www.canon.com](http://www.canon.com)



The Canon Pixma iP6700D prints excellent-quality photos comparable to those developed in a lab. Its ease of use ensures that veteran photographers won't miss the long days they spent in a darkroom ([macworld.com/2700](http://macworld.com/2700)).

### COMPACT PHOTO PRINTER

#### PictureMate Flash PM 280

RATING:  PRICE: \$300

COMPANY: Epson

URL: [www.epson.com](http://www.epson.com)



The PictureMate Flash PM 280 offers the best-looking 4-by-6-inch borderless photos of all the portable photo printers we've tested, and it prints them fast ([macworld.com/2396](http://macworld.com/2396)).

### MULTIFUNCTION INK-JET

#### Photosmart C7180

RATING: 

PRICE: \$400

COMPANY: Hewlett-Packard

URL: [www.hp.com](http://www.hp.com)



The HP Photosmart C7180's features, connection options, and solid print and

scan quality make it an excellent ink-jet MFP ([macworld.com/2475](http://macworld.com/2475)).

### MULTIFUNCTION LASER AcuLaser CX11NF

RATING:  PRICE: \$800

COMPANY: Epson

URL: [www.epson.com](http://www.epson.com)



This device has it all: it's a color laser print-

er, a sheet-fed scanner, a copier with networking capabilities, and a fax machine ([macworld.com/1669](http://macworld.com/1669)).

## FLATBED SCANNER

### Perfection V700 Photo

RATING: 

PRICE: \$550
































COMPANY: Epson

URL: [www.epson.com](http://www.epson.com)



The Epson Perfection V700 Photo is an excellent midrange scanner for people who need to scan both reflective

## MACS

PRODUCT	PROCESSOR	RATING	BEST PRICE <sup>a</sup>	DISPLAY	SPEEDMARK 4-5 SCORE <sup>b</sup>	FIND CODE <sup>c</sup>
DESKTOP						
	Intel Core 2 Duo/1.83GHz		\$989	17 inches		202 1727
	Intel Core 2 Duo/2GHz		\$1,149	17 inches		232 1728
	Intel Core 2 Duo/2.16GHz		\$1,489	20 inches		245 1729
	Intel Core 2 Duo/2.16GHz		\$1,879	24 inches		245 1730
	Intel Core Duo/1.66GHz		\$556	not included		152 1731
	Intel Core Duo/1.83GHz		\$755	not included		165 1732
	Intel Xeon/ two dual-core 2.66GHz		\$2,253	not included		299 2489
PORTABLE						
	Intel Core 2 Duo/2GHz		\$1,075	13 inches		192 2863
	Intel Core 2 Duo/2.16GHz		\$1,275	13 inches		195 2864
	Intel Core 2 Duo/2.16GHz (black)		\$1,449	13 inches		202 2865
	Intel Core 2 Duo/2.16GHz		\$1,869	15 inches		209 2340
	Intel Core 2 Duo/2.33GHz		\$2,299	15 inches		226 2341
	Intel Core 2 Duo/2.33GHz		\$2,536	17 inches		211 2342

<sup>a</sup> From a PriceGrabber survey of retailers as of June 5, 2007. <sup>b</sup> Speedmark 4.5 is Macworld Lab's standard test tool for benchmarking systems running Mac OS X 10.4 (Tiger). For information on Speedmark testing, go to [www.macworld.com/speedmark](http://www.macworld.com/speedmark). <sup>c</sup> Typing in find codes after [macworld.com/](http://macworld.com/) directs you to a product's review or overview. For example: [macworld.com/2489](http://macworld.com/2489) contains an overview for the 2.66GHz Mac Pro.

Top Products are those we've recently reviewed in a comparison of like products. As new products become available, we'll update the list. For longer reviews of these products and for other product recommendations, go to [macworld.com/reviews](http://macworld.com/reviews). All prices are as rated. For the best current prices, go to [macworld.pricegrabber.com](http://macworld.pricegrabber.com). All products were available as of May 18, 2007.



media and transparencies ([macworld.com/1519](http://macworld.com/1519)).

## DIGITAL CAMERAS

### DIGITAL SLR Digital Rebel XT

RATING: 

PRICE: \$899; with lens, \$999  
COMPANY: Canon  
URL: [www.canon.com](http://www.canon.com)



The Digital Rebel XT's feature set, image quality, and price, combined with the vast assortment of available Canon mount lenses, make it the best choice in the sub-\$1,000 digital SLR market ([macworld.com/0535](http://macworld.com/0535)).

### COMPACT DIGITAL CAMERA Coolpix S7c

RATING: 

PRICE: \$350  
COMPANY: Nikon  
URL: [www.nikon.com](http://www.nikon.com)



If you're looking for a full-featured point-and-shoot camera that delivers excellent image quality, the 7-megapixel Nikon Coolpix S7c is a great choice. Its ease of use and convenient Wi-Fi features add great value to a fine camera ([macworld.com/2386](http://macworld.com/2386)).

## MINIDV CAMCORDER

### PV-GS320

RATING: 

PRICE: \$500  
COMPANY: Panasonic  
URL: [www.panasonic.com](http://www.panasonic.com)



Compared with other 3-CCD MiniDV camcorders, the Panasonic PV-GS320 is a bargain. And it's a good choice for people who want a camcorder that shoots high-quality video and still images for half the cost of a high definition device ([macworld.com/2701](http://macworld.com/2701)).

## LCD MONITORS

### LARGE DISPLAY LP2465

RATING: 

PRICE: \$799  
COMPANY: Hewlett-Packard  
URL: [www.hp.com](http://www.hp.com)



The LP2465 is an affordable and flexible 24-inch desk-

top LCD with a 16:10 wide-screen aspect ratio that immediately makes one think of the cinema ([macworld.com/2508](http://macworld.com/2508)).

### MEDIUM DISPLAY MultiSync 2190UXi

RATING: 

PRICE: \$1,500  
COMPANY: NEC  
URL: [www.necdisplay.com](http://www.necdisplay.com)



The 21-inch NEC MultiSync 2190UXi doesn't come cheap, but graphics pros will love its vivid and accurate colors and wide viewing angle ([macworld.com/1445](http://macworld.com/1445)).

## DUAL-LAYER DVD BURNER

### DRX-830UL-T

RATING: 

PRICE: \$130  
COMPANY: Sony  
URL: [www.sony.com](http://www.sony.com)



The Sony DRX-830UL-T is an external rewritable drive that's capable of burning multiple for-

mats at very fast speeds. You can't ask for much more from a CD and DVD burner ([macworld.com/2510](http://macworld.com/2510)).

## FIREWIRE HARD DRIVES

### DESKTOP DRIVE G-Drive Q 500GB

RATING: 

PRICE: \$559  
COMPANY: G-Technology  
URL: [www.g-technology.com](http://www.g-technology.com)



The G-Drive Q SATA hard drive has nearly every type of connection you could want, and it operates without a fan, so it's very quiet ([macworld.com/1622](http://macworld.com/1622)).

### PORTABLE DRIVE Rocbit 2B




RATING: 

PRICE: \$230  
COMPANY: Roc-secure  
URL: [www.rocsecure.com](http://www.rocsecure.com)



The Rocbit 2B is a fast and pleasantly quiet portable hard drive featuring real-time encryption. It's well worth its cost if security is a concern ([macworld.com/1443](http://macworld.com/1443)).

# iPODS

PRODUCT	CAPACITY	RATING	BEST PRICE*	DISPLAY	BATTERY LIFE	MEDIA SUPPORTED	FIND CODE*
 iPod	30GB		\$180	2.5-inch color	14 hours of music playback; 4 hours of slide shows with music; 3.5 hours of video playback	Music, photos, album art, video, games	2233
 iPod	80GB		\$279	2.5-inch color	20 hours of music playback; 6 hours of slide shows with music; 6.5 hours of video playback	Music, photos, album art, video, games	2234
 iPod nano	2GB		\$100	1.5-inch color	24 hours of music playback; 5 hours of slide shows with music	Music, photos, album art	2235
 iPod nano	4GB		\$145	1.5-inch color	24 hours of music playback; 5 hours of slide shows with music	Music, photos, album art	2236
 iPod nano	8GB		\$184	1.5-inch color	24 hours of music playback; 5 hours of slide shows with music	Music, photos, album art	2237
 iPod shuffle	1GB		\$48	N/A	12 hours of music playback	Music	2238

\*From a PriceGrabbers survey of retailers as of June 5, 2007. \*Typing in find codes after [macworld.com/directs](http://macworld.com/directs) you to a product's review or overview. For example: [macworld.com/2233](http://macworld.com/2233) contains an overview for the 30GB video iPod.



# Software Treats

## 63 Great Mac Programs

That Won't Cost You a Bundle

**T**here's a lot of free and low-cost software available to Mac users these days. The challenge is sifting through that vast selection to find the prized few worthy of a permanent place on your hard drive. So to help you out, we've scoured the Web and come up with 42 great Mac programs that don't cost a pretty penny—in fact, many of them are free. We also asked some of our favorite writers and Mac luminaries to choose 21 past software gems that they still can't live without. Come see all the goodies we've found.

Don't forget to take a look at Macworld's monthly Mac Gems column and visit our Mac Gems Weblog ([macworld.com/macgems](http://macworld.com/macgems)) for a ton of other software bargains you won't want to miss.

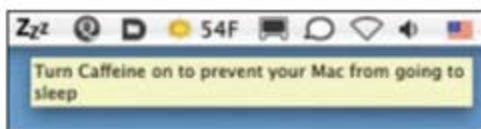
ILLUSTRATIONS BY JOHN UELAND







# Take Control of Your System



## UTILITY

## Caffeine 1.1

If you need your Mac to always be awake—because you're serving up your Web site from it, perhaps—you can use the Energy Saver pane in System Preferences to turn off all sleep options. But if you need your Mac to be sleepless only occasionally, Caffeine 1.1 (●●●●) is the stimulant for you. Set your Mac up with normal energy-conserving settings; when you need it to be sleepless, simply click on the Caffeine icon in the menu bar. While thus "Caffeinated," your Mac won't go to sleep, dim its screen, or activate a screen saver. When you no longer need Caffeine's help, you can revert to your standard settings by clicking on the icon again (free; Lighthouse Software, [www.lighthousew.com](http://www.lighthousew.com)).—DAN FRANKS

## UTILITY

## DasBoot 1.0.2

Even in OS X, things can go wrong, so having diagnostic and repair tools on hand is important. DasBoot 1.0.2 (●●●●●) takes an interesting approach to the problem: it lets you install the software from bootable repair CDs and DVDs, such as Alsoft's

DiskWarrior or Micromat's TechTool Pro, onto an iPod (or a portable hard drive or flash drive, for that matter) with enough free space. You then have a portable repair system you can use to boot and fix your Mac much more quickly than you can with a CD or DVD (just remember that not all iPod models or cables will work with all



Macs for booting purposes). DasBoot can also install other OS X programs, such as Console, Disk Utility, System Profiler, and Terminal, for use when diagnosing problems. Installing and running DiskWarrior from a fourth-generation iPod, for example, worked flawlessly for fixing problems on my Mac Pro. Best of all, your iPod remains an iPod—you can still use it to listen to music, view photos, and watch movies (free; SubRosaSoft.com, [www.subrosasoft.com](http://www.subrosasoft.com)).—JONATHAN L. SEFF

## PRODUCTIVITY

## inkBook 1.3.2

Apple's handwriting recognition technology, Ink, is OS X's forgotten feature; inkBook 1.3.2 (●●●●) gives it new life. If you have a compatible tablet, such as a Wacom model or OWC's ModBook, inkBook provides a virtual pad on which you can write notes by hand; behind the

scenes, Ink recognizes each word and converts it into standard text. You can search your handwritten notes for particular words, copy your handwriting and paste the text into another document, or export your notes directly to a text file. You can even drop an image or a PDF file into inkBook to make it a new page in a document; you can then write on the image or PDF. You can also use calligraphy and paintbrush modes to sketch complex creations right next to your text (\$20; Mage Software, [www.magesw.com](http://www.magesw.com)).—DF

## BACKUP

## NTI Shadow for Mac 3.1.07

While you should regularly back up your entire hard drive, making frequent backups of just the files you modify often can be even more critical. Preserving these files is the idea behind NTI Shadow for Mac 3.1.07 (●●●●). It doesn't have all the bells and whistles of a full-featured backup utility, but it is quicker and easier to use than most. Just select one or more files or folders, and then set a backup schedule—and you're done. Choose a brief interval—30 minutes, say—and you'll never again risk losing recent versions of files. You can also choose to save, rather than delete, older versions of backed-up files. The program has some rough edges—it occasionally disregarded the schedule I selected, backing up less often than it should have, for example—but it's still a worthwhile addition to your Mac (\$30; NewTech Infosystems, [www.ntius.com](http://www.ntius.com)).—TED LANDAU

## UTILITY

## PlistEdit Pro 1.3

There are several choices out there when it comes to utilities for editing property list (.plist) files, including Apple's own Property List Editor (one of the Xcode developer applications). If you want the best choice, however, shell out a few bucks and get PlistEdit Pro 1.3 (●●●●). PlistEdit Pro's extensive feature list includes the ability to cut or copy any .plist file property and paste it into another file (something Property List Editor can't do). Finding and editing the file or





property you want is a snap—a Find dialog box offers numerous options for locating and replacing any property within an open file. And a convenient Preference File Browser lists all the .plist files in your Preferences folders and lets you search for a file by name or by content (\$25; Fat Cat Software, [www.fatcatsoftware.com](http://www.fatcatsoftware.com)).—TL



#### PRODUCTIVITY

### PTHPasteboard Pro 4.2 Δ

Everytime you cut, copy, or paste, you use your Mac's Clipboard. But the Clipboard holds just one item at a time—you overwrite that item when you copy something else, and the Clipboard contents are erased when you shut down your computer. Enter PTHPasteboard Pro 4.2 (★★★★), which lets you store as many copied or cut items as you need and selectively paste any one of them with a few clicks or keystrokes. Copied items will still be there even after you restart. Plus, you can define custom pasteboards to store frequently used items such as boilerplate text. Unlike the free PTHPasteboard, the Pro version offers filters that can manipulate your text while pasting it (changing the case, performing find-and-replace actions, or removing formatting, for example), and it lets you sync pasteboards between Macs (\$20; PTH Consulting, [pth.com](http://pth.com)).—JOE KISSEL

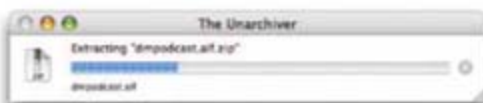
#### UTILITY

### Sounds4Fun 1.0.1

If you remember the classic Mac OS sound utilities SoundMaster, iBeep2, SndControl, and FunSounds, you'll probably enjoy their



OS X equivalent, Sounds4Fun 1.0.1 (★★★★). This amusing utility plays sounds whenever you perform events such as accessing a menu, moving a file, opening a document, pressing the caps lock key, and closing a window—there are nearly 70 events in all. Although Sounds4Fun provides sample sounds, the real fun begins when you supply your own (in AIFF, MP3, M4A, .mov, SFIL, or WAV format). You can configure and switch between sound sets, and you can assign a hot key to turn Sounds4Fun on and off. In addition to being just plain fun, the custom alerts Sounds4Fun creates may appeal to your practical side as well—for example, an alert can let you know that your MacBook or MacBook Pro's MagSafe power connector has come loose (\$14; Ettore Software, [ettoresoftware.com](http://ettoresoftware.com)).—DF



#### UTILITY

### The Unarchiver 1.6 Δ

The vastness of the Internet often throws you into close quarters with myriad arcane and cryptic compression formats. While OS X's built-in decompression feature can handle most ZIP files, what do you do when you encounter the odd RAR or ACE file? The Unarchiver 1.6 (★★★★) deals with these files and more with aplomb. The Unarchiver's preferences let you choose which formats the program will handle. Although it does work with Stuffit's SIT format, it isn't compatible with the newer SITX format, so you'll probably still need to keep a copy of Stuffit Expander handy. And as its name suggests, it handles only *unarchiving* tasks; for your compression needs, you'll have to look elsewhere (payment requested; Dag Ågren, [wakaba.c3.cx](http://wakaba.c3.cx)).—DAN MOREN

## GEMS FAVORITES



### Adam C. Engst

Macworld senior contributor and publisher of the TidBits newsletter:

#### Backdrop ★★★★; [macworld.com/2604](http://macworld.com/2604)

For those of us who need to take screenshots of OS X's frequently translucent interface elements, Backdrop's disarmingly simple function—putting a white background above all the usual window clutter—is tremendously useful.

#### EasyFind ★★★★; [macworld.com/1209](http://macworld.com/1209)

Spotlight simply doesn't work well for me, since I often want to limit my search to just file names—a task that EasyFind performs with less fuss.

#### GrandPerspective ★★★★; [macworld.com/2433](http://macworld.com/2433) and WhatSize ★★★★; [macworld.com/2433](http://macworld.com/2433)

When I'm running out of space on one of my Macs, I take a two-pronged approach to identifying the culprits. First I run GrandPerspective to get a graphical overview of which folders and files are the largest. Then I use WhatSize to drill down and determine more specifically what I want to delete.

#### SubEthaEdit ★★★★; [macworld.com/1672](http://macworld.com/1672)

For quick writing with a small group, such as the writing we need to do when covering an Apple keynote for TidBits, I have come to depend on SubEthaEdit's real-time collaborative writing capabilities.

#### UTILITY

### USB Overdrive 10.4.5

Have a USB input device—old or new—that doesn't have OS X drivers (or has drivers that are, well, lacking)? USB Overdrive 10.4.5 (★★★★) may be the solution to your problems. This Universal USB driver works with most third-party USB devices—including mice, trackballs, joysticks, and game pads—and lets you con-





figure the systemwide or application-specific behavior of each button or switch. Possible actions include a variety of clicks; keystrokes; system, editing, and browser commands; and cursor controls. You can also configure buttons on your input devices to launch programs, open documents, and go to URLs. Note that USB Overdrive doesn't work with all devices (for instance, it doesn't work with Bluetooth ones), so be sure to try out the free demo before buying (\$20; Alessandro Levi Montalcini, [www.usboverdrive.com](http://www.usboverdrive.com)).—DF

#### UTILITY **Uno 1.5.1**

Ever wish you could override the design team at Apple and apply Tiger's slick unified-toolbar interface to all of your programs? With Uno 1.5.1 (★★★★), that's finally possible. The program lets you assign one of several variations on the unified-toolbar's appearance to your software, including

the Finder, Safari, Mail, iTunes, QuickTime, and Preview (as well as dialog boxes and other system windows). Since Uno swaps out system files, it doesn't necessarily play nice with all your other programs: some third-party software may look a little odd. Luckily, Uno gives you a preview of what programs will look like before you apply the change (but you'll need to restart to see the effects in action). And if you decide that Apple had the right idea after all, you can always restore your system to the way it was (payment requested; Pedro Grilo, [gui.interacto.net](http://gui.interacto.net)).—DM



#### GRAPHICS **VueScan 8.4.22**

If you've got an older scanner that's not supported in the current version of OS X—or a supported scanner that's sorely lacking software features—check out VueScan 8.4.22 (★★★★). This scanner software package works with nearly any scanner that you can physically connect to your Mac (more than 700) and provides both basic and advanced scanning features. VueScan gives you extensive control over your scans, including color-balance adjustments—you can choose from presets for common photo-taking conditions, such as fluorescent or incandescent lighting, and for particular media, such as slides and film negatives. You can also save setting combinations without altering the original scan. VueScan even provides simple optical character recognition features and performs batch scanning. Note that some scanners still require drivers from the manufacturer; for these scanners, VueScan acts only as your scanning software (Standard Edition, \$40; Professional Edition [with lifetime updates and additional features], \$80; Hamrick Software, [www.hamrick.com](http://www.hamrick.com)).—DF



#### UTILITY **Visor 1.2.1** △

As a concept, Visor 1.2.1 (★★★★) will be familiar to people who've played games such as Quake 3. When you install this handy add-on (a SIMBL plug-in, actually), you'll be able to press a hot key of your choice and have a Terminal window slide down from the top of your screen—command-line jockeys will wonder how they ever got by without it. The Tiger-only program even lets you specify a Quartz animation—one of Tiger's screen savers, for example—as a background, though doing so will slow it down a bit. While the program has a few quirks (Terminal needs to be running, though some enterprising users have come up with hacks that hide it), people who live on the command line will quickly find that Visor has become part of their muscle memory (free; Blacktree, [macworld.com/2603](http://macworld.com/2603)).—DM

PHOTOGRAPH BY PETER BELANGER

### **GEMS FAVORITES**



#### **Rick LePage**

Macworld's editor at large:

**ImageWell** ★★★★★; [macworld.com/2781](http://macworld.com/2781)

Resizing images or converting them to PNG or JPG is painless with ImageWell, which is also a great tool for quick edits or for watermarking images without having to go into Photoshop.

**LaunchBar** ★★★★★; [macworld.com/1010](http://macworld.com/1010)

For me, there's no more useful program than this all-purpose file launcher and search utility. It adapts to my work brilliantly, and the developer continues to add the right features while keeping it bloat-free.

**Menu Master** ★★★★★; [macworld.com/1207](http://macworld.com/1207)

I use quite a few of Unsanity's *haxies*, and Menu Master—which lets me customize my menus to suit the way I want to work—is the one I absolutely can't live without. It's simple and elegant, and it's the first thing I install on any new Mac.

**Snapz Pro X** ★★★★★; [macworld.com/1473](http://macworld.com/1473)

Snapz Pro is obviously the best utility for making screen grabs for reviews and blog entries, but it's so good that I keep finding new uses for it. The movie-capture feature, for example, lets me show my folks how to do something in iPhoto.



# Connect with the World

CHAT

## Adium 1.0.3

While iChat is fine for people just starting out in the world of instant messaging, seasoned IM users might yearn for a little more variety. The open-source Adium 1.0.3 (★★★★) gives you choices in spades. It easily supports accounts on all major chat networks, from AIM to Yahoo, and even lets you log in to multiple accounts at the same time, consolidating all of your contacts into one master buddy list. Its user-interface customization capabilities put iChat to shame, and its built-in log viewer will be a huge help when you need to find that link your friend sent you the other day. Like iChat, Adium plays nicely with OS X's Address Book and supports encrypted chat. On the downside, it lacks iChat's audio and video chatting, and file transfers can be wonky at times (payment requested; Adium, [adiumx.com](http://adiumx.com)).—DM



AUDIO-VIDEO

## Call Recorder 2.0

Interviews are a great way to spice up podcasts. Skype has made long-distance calling via your computer easy and inexpensive, and Call Recorder 2.0 (★★★★) makes it a cinch to record a Skype chat for inserting

into your next podcast: it's literally as simple as clicking on a button. Call Recorder lets you choose the compression method and the recording quality, and it's smart enough to record you and your chat partner on separate tracks—perfect for editing later. It also lets you record one or both

# Your Mac Pro's Dream Date



## The 3ware Sidecar & Your Apple Mac Workstation: The Perfect Match

The 3ware® Sidecar by AMCC is a powerful SATA RAID desktop storage solution designed specifically for the Apple® Power Mac® G5 with PCI Express and Mac Pro. At speeds 4-8x faster\* than Firewire or USB, it can store and protect tons of your photos, songs, videos, illustrations and web pages.

Whether you're editing and archiving digital photo shoots or snapshots, home movies or future Academy Award® winning films, garage jam sessions or professional mixes — rest assured your data will always be protected. The 3ware Sidecar is designed for creative professionals and enthusiasts who care about their data and just can't risk losing it! With the 3ware Sidecar, your data is RAID protected, so a failed drive won't mean the loss of hours of creative output.

On the set, in your studio or at the office, the 3ware Sidecar lets you think outside the box. And with up to 3TB\*\* of storage capacity, there's no need to worry about running out of space. Just install, set up and connect — it's as easy to use as 1-2-3.

3ware Sidecar, the perfect partner for your G5 or Mac Pro workstation — no dinner required.



Think Outside the Box  
Find out more at [www.3ware.com](http://www.3ware.com)  
Or call (877) 88-3ware; 877-883-9273



AMCC and 3ware are registered trademarks of Applied Micro Circuits Corporation. All other trademarks are the property of their respective holders. Copyright © 2006 Applied Micro Circuits Corporation. All Rights Reserved.

\* SATA II: 300MB/second; Firewire: 80MB/s or 40MB/s; USB 2.0: 48MB/s  
\*\* Using four 750GB SATA drives (not included)



sides of a video chat in versions of Skype that support it (\$15; Ecamm Network, [www.ecamm.com](http://www.ecamm.com)).—DM

**INTERNET**

# Cyberduck 2.7.3

Competition among file-transfer clients on OS X can get heated at times—heavyweights include Transmit and the venerable Inter-

archy. Cyberduck 2.7.3 (★★★★) has one big advantage over both of these worthy competitors: it's free (donations are requested). This open-source program's features include must-haves like SFTP support, integration with OS X's Keychain, and drag-and-drop file transfers. It also supports external editing with most common text editors. The intuitive interface will be familiar to any Mac user; it mimics the Finder's list view. To me, Cyberduck's top feature is its ability to resume stopped downloads, even after you've quit and reopened the program (payment requested; David V. Kocher, [cyberduck.ch](http://cyberduck.ch)).—DM



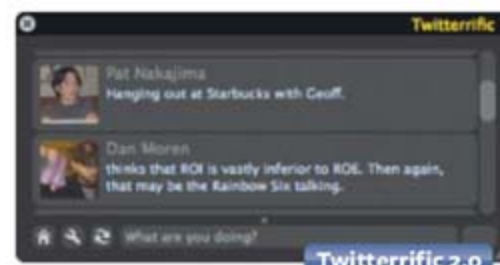
rent files at once, limiting upload and download bandwidth for each (although that takes a few extra steps). It lets you filter your view to see only active downloads, files you've completed and are continuing to share with others, or files you've paused and aren't actively downloading. And it offers any information you could want about torrents. All it's missing is

the ability to download individual files from larger sets—one reason I keep Azureus installed on my Macs, too (free; Transmission Project, [transmission.m0k.org](http://transmission.m0k.org)).—JLS

**INTERNET**

# Twitterrific 2.0

Say what you will about Twitter, the new social-networking phenomenon—but if you're using it without Twitterrific 2.0 (★★★★), you're getting only half the experience. This slick little program lets you forgo Twitter's Web-based interface, checking for tweets at regular intervals and enabling you to post your own. Keyboard shortcuts let you summon or hide Twitterrific's window, easily reply to tweets, and even send private messages. The latest version adds integration with IM clients, so you can opt to set your latest tweet as your status message. So what doesn't Twitterrific come with? A much-needed warning about just how addictive Twitter can be (free; The Iconfactory, [iconfactory.com](http://iconfactory.com)).—DM



## GEMS FAVORITES



### Merlin Mann

Editor of and primary contributor to 43 Folders ([43folders.com](http://43folders.com)):

#### Default Folder X (★★★★); [macworld.com/1678](http://macworld.com/1678)

You can tell Default Folder X is a classic because you start missing it the second you sit down at a Mac that doesn't have it installed. It reduces the tedium of a handful of annoying dialog-box tasks, and it's worth its price solely for the ability to set a per-program default location.

#### MailTags (★★★★); [macworld.com/2457](http://macworld.com/2457)

This Apple Mail add-on will make you scratch your head and ask why its features aren't already available in OS X's e-mail program. MailTags makes it a breeze to apply ad hoc tags, as well as—my favorite—generate iCal tasks and appointments that stay associated with the originating e-mail message.

#### SuperDuper (★★★★); [macworld.com/2325](http://macworld.com/2325)

This is the most brain-dead-easy way I know of to make a bit-for-bit bootable image of a Mac's drive—a true lifesaver in waiting.

#### TextExpander (★★★★); [macworld.com/1672](http://macworld.com/1672)

This huge time-saver creates tiny text shortcuts for big blocks of text. It's great for boilerplate responses, and it can also correct your most-common typos. It saves me a few thousand keystrokes a week.

**BUSINESS PRODUCTIVITY**

# PageSender 4.0.1

PageSender 4.0.1 (★★★★) is a must for anyone who handles more than the occasional fax. Like OS X's built-in feature, PageSender lets you send faxes via OS X's Print dialog box and receive incoming faxes automatically. But PageSender provides postreception features that actually work, integration with most popular contact-management and e-mail-client address books, the ability to attach PDF documents and custom cover pages to faxes, and even spam filtering on incoming faxes. It also works with fax services such as eFax, jConnect, EasyLink, and MaxEmail (\$40; SmileOnMyMac, [www.smileonmymac.com](http://www.smileonmymac.com)).—DF

**INTERNET**

# Transmission 0.72

As someone who loves downloading (legal) recordings of live music, I've tried most of the BitTorrent clients out there—software



# Get Creative



## PHOTOGRAPHY

### DoubleTake 2.1

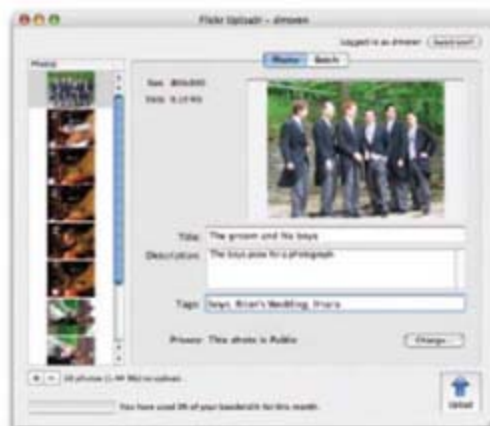
Many digital cameras come with a photo-stitching program that lets you combine several photos in a panorama. But I haven't seen one that works as well as DoubleTake 2.1 (★★★★). Drag a group of photos into DoubleTake, and it automatically arranges and combines them—even if they were out of order when you dragged them in. If the arrangement isn't right, you can drag images to the correct placement. To perfect the arrangement, you can rotate, tilt, and scale each image, as well as adjust its exposure, gamma, brightness, contrast, and saturation. You can even correct fish-eye distortion via a focal-length control. And if you can't quite get the colors of two adjoining images to match, you can move the seam between them to a different location or widen the seam for a more gradual transition. DoubleTake lets you save both the resulting image and the arrangement—so you can go back and make changes later—and includes options for creating a QuickTime VR movie and for printing poster-size images on a standard printer (\$22; Echo One, [echoone.com](http://echoone.com)).—DF

## PHOTOGRAPHY

### FlickrBooth 1.1

Though Photo Booth, which Apple includes on all Macs with built-in iSight cameras, may not boost your productivity, it sure is fun. But once you've taken shots

of yourself with all sorts of crazy effects, how do you share them with your friends? With the FlickrBooth 1.1 plug-in (★★★★), naturally. It gives you the option of uploading your snapshots to the photo-sharing site Flickr, either automatically or on a per-picture basis. FlickrBooth lets you title, describe, and tag the pics, and it even offers an option for tagging them with the effect used (Sepia or Pop Art, for example). And since it also tags them with the word *flickrbooth* by default, it's easy to browse Flickr for other people's Photo Booth shots (payment requested; Tristan O'Tierney, [www.otierney.net](http://www.otierney.net)).—DM



## PHOTOGRAPHY

### Flickr Uploadr 2.3

People who love to share their digital photos know that Flickr is the place to go on the Web. But while Flickr's Web-based upload-

ing is fine for one or two snaps, uploading a memory card full of shots from your vacation is a pain. Fortunately, Flickr also provides the free Flickr Uploadr 2.3 (★★★★), stand-alone software that lets you easily upload a batch of photos (you can even drag and drop pictures from iPhoto). Flickr Uploadr can scale pictures to a preferred size (great for people with free Flickr accounts, which limit monthly bandwidth). You can also tag your photos, individually or as a batch; create new photo sets; and choose who's allowed to view your shots. And the latest version is Universal (free; Flickr, [www.flickr.com/tools](http://www.flickr.com/tools)).—DM



## PHOTOGRAPHY

### Posterino 1.1

If you want to create a collage of your favorite photos and put it on a poster, Posterino 1.1 (★★★★) is the slickest and easiest way to get the job done. The program offers a variety of templates, with grids of identically sized frames or with mixtures of shapes and sizes. Adding photos from iPhoto or elsewhere is a cinch. You can have Posterino fill the frames for you, or you can drag and drop images manually for more control. You can also change the size and shape of individual frames, and adjust the placement of each image within its frame. Export options let you send your finished poster to iPhoto or Flickr, hand it off to your e-mail program, or save it elsewhere on your hard drive. The program also lets you create postcards, but they'll cost you about \$4 to mail, since they're





**PulpMotion 1.1.2**

mailed through the Swiss Post (\$25; Zykloid Software, [zykloid.com](http://zykloid.com)).—KELLY TURNER

**DESIGN**

**PulpMotion 1.1.2**

The Mac encourages creativity, and this has inspired Aquafadas to provide a more entertaining approach to making photo slide shows. PulpMotion 1.1.2 (●●●●) lets you put your photos (as well as videos and live captures from an iSight or a camcorder)

into animated themes. And like the themes found in Apple's Keynote or iDVD, PulpMotion's environments range from whimsical to boardroom professional. You can crop and rotate images within the program, as well as apply a dizzying array of set-

tings to a slide show—such as customizable backgrounds and timing adjustments, all powered on-the-fly by OS X's Quartz technology. You can then export the result as a movie in several formats, including iPod- and Apple TV-compatible ones; pass it along to iWeb, iDVD, GarageBand, or Mail; or even save it as an OS X screen saver. PulpMotion does have some rough edges, such as the inability to use photos from Aperture. But it's a fun way to express your-

self by using more than just your photos' contents (\$30; Aquafadas Software, [www.aquafadas.com](http://www.aquafadas.com)).—JEFF CARLSON

**EDUCATION**

**Quiz Press 1.7.6**

Quizzes are popular ways to test students' (or employees') knowledge; Quiz Press 1.7.6 (●●●●) lets you put your quizzes on the Web. The program's easy-to-use interface lets you create multiple-choice, fill-in-the-blank, short-answer, true-or-false, and cloze questions; you can even include audio and video (in Flash format). After creating your quiz, you just copy the resulting folder of HTML and Flash files to your Web server or .Mac Sites folder (or use Web Sharing on a local Mac). Quiz-takers can use any browser to take the test. At the end, the online quiz tells the taker how well he or she did, and which questions were missed; a click of a button sends you, the quiz-giver, the results in an encrypted format. Quiz Press doesn't manage the results, but it's a great way to create electronic tests (\$50; Sol Robots, [www.solrobots.com](http://www.solrobots.com)).—DF

# MacMania™ 7

November 3rd – 13th, 2007 • Panama Canal

[www.GeekCruises.com/Mac-7](http://www.GeekCruises.com/Mac-7)



**Speakers**

Janet Hill • David Pogue  
Randal Schwartz • Jason Snell  
Derrick Story • Robin Williams  
Steve Wozniak

**SEMINARS**

- Introduction to Lightroom
- Introduction to Aperture • Maximizing iPhoto
- Photoshop for Photographers
- Integrating Photoshop with Aperture, Lightroom, or iPhoto • Leopard Power User Tips
- Which Is Best for You — Aperture, Lightroom, or iPhoto? • Amazingly Cool Utilities
- iPhone: The Missing Manual
- Pushing iLife to the Limit
- Apple's Latest and Greatest



**Insight Cruises**  
EDUCATION THAT TAKES YOU PLACES

CO-PRODUCED BY:

**Macworld**

CST# 2065380-40



# Look, Listen, and Learn

## AUDIO

### ClickRepair 2.1

Converting LP tracks into digital music files is a snap—plenty of programs handle that task with ease. The more difficult part of the process is ridding the files of audible flaws—clicks, pops, crackles, and thumps caused by scratches, dust, and other damage. ClickRepair 2.1 (★★★★) has become almost legendary for its effectiveness in performing this task without significantly affecting audio quality. You can customize ClickRepair to be more or less aggressive in its efforts; you can save settings that you've found to be effective with particular types of music; and you can manually remove sonic blemishes. Useful monitoring modes let you hear the original or soon-to-be-repaired audio (or just the noise being removed) in real time. Finally, the ClickRepair manual and Web site provide extensive documentation and tutorials on the process of converting vinyl to digital (\$45; Brian Davies, [macworld.com/2602](http://macworld.com/2602)).—DF



## AUDIO

### EasyWMA 2.7.3

If you've got WMA, WMV Audio, ASF, or Ogg Vorbis audio files that you'd like to be able to play in iTunes or on your iPod, EasyWMA 2.7.3 (★★★★) is worth a look. Just choose your output format (AIFF, MP3, M4A/AAC, or WAV) and bit rate, and then drag the audio files—as many as you want—into the EasyWMA window; the program will quickly convert and save them in a location of your choosing. (Unfortunately, EasyWMA doesn't support DRM-enabled Windows Media files or the WMA Lossless and WMA Voice codecs.) The software preserves existing ID3 tags and can even import the resulting

tracks into iTunes (\$10; Patrice Bensoussan, [www.easywma.com](http://www.easywma.com)).—DF

## WEB

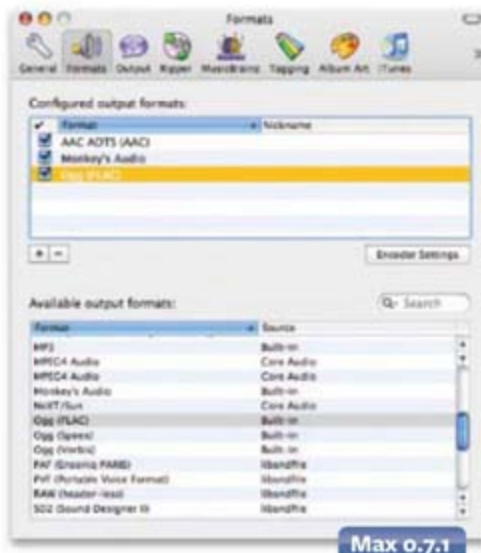
### FLVR 1.0

How many times have you found a great video on a Web site and tried to save it to your hard drive, only to discover that the clip is in Flash format? Thanks to the FLVR 1.0 plug-in for Safari (★★★★), Flash no longer means “can't download.” FLVR places a new button in Safari's toolbar and lets you download any Flash media from a Web page, with just a few clicks. Even better, FLVR can automatically convert Flash video to AVI, MP4, or QuickTime files (using the MPEG-4 or H.264 codec) and can save Flash audio as AAC or MP3 files, so you can take the files with you on an iPod (\$15; Tasty Apps, [www.tastyapps.com](http://www.tastyapps.com)).—DF

## AUDIO

### Max 0.7.1

If you're an audio geek, you may feel limited by iTunes when it comes to features for



converting your CDs to digital music files. If so, you'll want to check out Max 0.7.1 (★★★★), which lets you rip CDs to more than 20 audio formats, including all of iTunes' choices (AAC, AIFF, Apple Lossless, MP3, and WAV), as well as such popular alternatives as FLAC, Monkey's Audio, and Ogg Vorbis. Max also offers advanced options for ripping damaged discs and tag-

## GEMS FAVORITES



### Rob Griffiths

Macworld senior editor and creator of MacOSXHints.com:

#### Butler ★★★★★; [macworld.com/1246](http://macworld.com/1246)

This powerful tool does everything for me—launches programs, controls iTunes, creates navigable pop-up folders, runs AppleScripts, and even handles basic macros. It's my one can't-work-without-it utility.

#### Chax ★★★★★; [macworld.com/2605](http://macworld.com/2605)

I have dozens of open chat windows most of the time, so Chax brings me order by adding a tabbed window to iChat. This essential iChat add-on also has built-in log and activity viewers.

#### Google Earth ★★★★★; [macworld.com/2379](http://macworld.com/2379)

I used to take out my bike or car to measure routes that I like to run. Now I just use Google Earth's path tool to get an accurate measurement without leaving the house. When I'm done, I can copy and paste the map of the route, and keep it for future use. (Oh, yeah—it's also a great way to explore the planet.)

#### Keyword Assistant ★★★★★; [macworld.com/2782](http://macworld.com/2782)

If you use keywords in iPhoto (and you should), Keyword Assistant makes it much easier to add, delete, and work with your keywords. It's an essential add-on for high-volume users of keywords in iPhoto.



ging tracks; lets you customize the format for file names; and can even automatically rip multiple versions of each track—for example, uncompressed for playing in your home audio system and compressed for use on an iPod (payment requested; Stephen F. Booth, [sbooth.org](http://sbooth.org)).—DF

**VIDEO**

**NicePlayer 0.95**

Many QuickTime Player users find themselves frustrated when they try to play video in full-screen modes (that's possible only if you pony up \$30 for QuickTime Pro).



The open-source NicePlayer 0.95 (★★★★) lets you do that and more. It'll play DVDs, and even let you use the Apple Remote to control playback from the comfort of your couch. One unique feature of NicePlayer is the ability to resize the video using your mouse's scroll wheel—this allows you to eliminate letterbox effects in some DVD videos. With the addition of codec plug-ins, NicePlayer can handle pretty much any format you throw at it. And unlike QuickTime Player, it supports playlists (payment requested; Robert Chin and Jay Tuley, [niceplayer.sourceforge.net](http://niceplayer.sourceforge.net)).—DM

in Motion 2.4 (★★★★). This widget lets you watch animated radar and satellite maps from either Weather.com or the National Oceanic and Atmospheric Administration's Web site. You can add as many maps as you want and set them to cycle automatically or with the click of a button. Now you'll never be more than a keystroke away from knowing whether it's about to rain outside—even if your office doesn't have any windows (free; Kamal Aboul-Hosn, [www.dividedsoul.net](http://www.dividedsoul.net)).—DM

**GEMS FAVORITES**



**Andy Ihnatko**

Technology columnist for the *Chicago Sun-Times*:

**FlickrExport for iPhoto** (★★★★);

[macworld.com/2784](http://macworld.com/2784)

This plug-in provides seamless integration between my photo library and the service that lets me share my pics with the world—a no-brainer for any enthusiastic snapper.

**Salling Clicker** (★★★★);

[macworld.com/1721](http://macworld.com/1721)

For God's sake, Apple, write this man a check. A Bluetooth phone is the one device that you have with you at all times. Who wouldn't want to always have the ability to control and communicate with his or her Mac?

**SmartReporter** (★★★★);

[macworld.com/2783](http://macworld.com/2783)

I've had this installed in my menu bar—and have been nervously eyeing it regularly—since the day three years ago when my PowerBook's hard drive failed.

**VLC media player** (★★★★);

[macworld.com/1684](http://macworld.com/1684)

I'm still thrilled and surprised that a program this good and handy is still free and still energetically updated. It's a must-have, if only because it's the easiest way to watch a DVD and still be able to make screen grabs.

**EDUCATION**

**Periodic Table 4.0.6**

In addition to giving you basic periodic-table information, Periodic Table 4.0.6 (★★★★) provides property-specific tables (for example, physical and bonding properties), a molecular-mass calculator for compounds, customizable graphs and tables (including alternative table arrangements and the ability to build tables that include just the information you want), and a built-in chemistry glossary. Add to that more-detailed information on each element than you'll likely find in any other resource, along with the ability to generate a slew of educational graphs, and you have a handy tool for students, teachers, and professionals alike (\$20; Synergy Creations, [www.synergycreations.com](http://www.synergycreations.com)).—DF

**DASHBOARD**

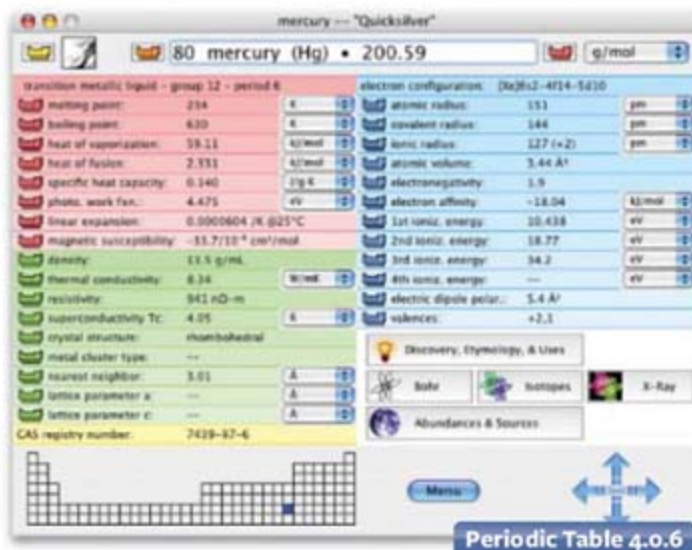
**Radar in Motion 2.4**

Weather mavens may find Dashboard's included Weather widget somewhat lackluster. Its icons are pretty enough, but what if you want more in the way of raw data? Then turn to Radar

**AUDIO**

**Soundflower 1.2.1**

Soundflower 1.2.1 (★★★★) lets you route audio from one program to another through the use of virtual audio devices. For example, you could set Skype's sound output to Soundflower as well, set GarageBand's sound input to Soundflower, and then record the audio from Skype into GarageBand. An included program, Soundflowerbed, sits in your menu bar and lets you monitor the audio through your headphones, your speakers, or another output device. Since Soundflower acts as a virtual audio device, you can also set it as the default input and output for programs that don't let you select audio sources (free; Cycling '74, [www.cycling74.com](http://www.cycling74.com)).—DM





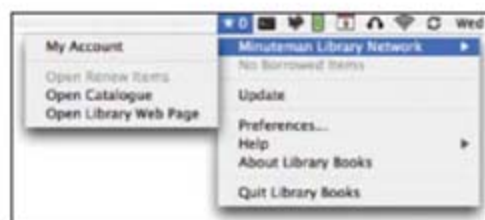
# Organize Your Life



## ORGANIZATION

### ComicBookLover 1.2

ComicBookLover 1.2 (4.0/5) is the iTunes for digital comics, letting you organize and read comic-book files stored on your hard drive. Yes, as with iTunes, those files could be illegally downloaded from the Internet. But legal downloadable comics are on the rise, and ComicBookLover is also compatible with the files on the DVD comic collections that major publishers are releasing. ComicBookLover lets you view comics in a window or in full-screen mode, offers an iTunes-style interface for filtering your collection, and lets you browse comics via its handsome cover-gallery feature (\$25; Bitcartel, [www.bitcartel.com](http://www.bitcartel.com)).—JASON SNELL



## UTILITY

### Library Books 2.5

As high-tech as our lives may be, most of us still enjoy reading actual books from time to time. Library Books 2.5 (4.0/5) brings your local library into the digital age by letting you see at a glance how many items you've checked out of the library, when they're due, and even (in some cases) how many items you've requested. You can set up accounts for multiple libraries—a school and a public library, for example—or keep track of multiple people's accounts. Library Books even integrates with iCal to remind you when your due dates are getting close,

which should help you avoid fines. With nearly 200 library systems supported in the United States (plus dozens from eight other countries), there's a chance your library is included. If you don't see it listed, you can try one of the several included generic catalog systems (payment requested; Harold Chu, [haroldchu.id.au](http://haroldchu.id.au)).—DM

## ORGANIZATION

### ReceiptWallet 1.1.1

If you've got shoeboxes full of paper receipts—or folders full of PDF versions on your Mac—ReceiptWallet 1.1.1 (4.0/5) can help you unclutter your life. Drag your PDFs or scanned receipts into ReceiptWallet, or use one of many TWAIN-compliant scanners to scan in the paper versions directly, and the software will keep them all organized (and accessible) for you. And if you take the time to enter a few pertinent details—such as the date, the store, the amount, and a category or two—you'll get a searchable database of your purchases that lets you immediately find any receipt. You can create smart collections based on criteria such as categories, dates, and stores—useful for putting together expense reports, maintaining warranty records, or tracking how much you've spent on utilities, for example. You can even export data as CSV or Quick CIF files (\$30; GGT Enterprises, [www.receiptwallet.com](http://www.receiptwallet.com)).—DF

## EDUCATION

### Schoolhouse 2.1

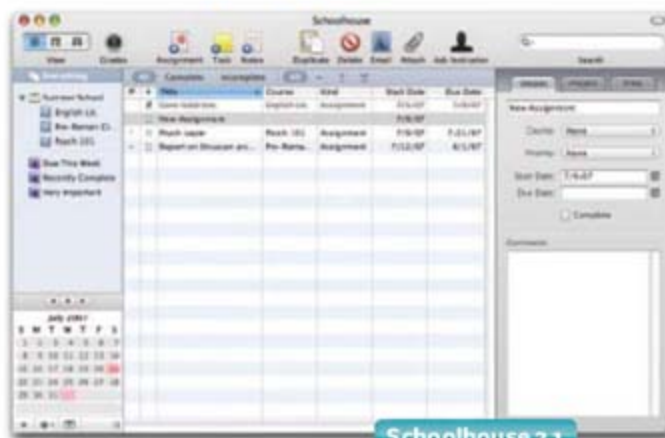
With lots of word processing, calculation, and Web research tools available for OSX, your Mac is terrific at helping you do your homework. Now, with Schoolhouse 2.1 (4.0/5), you can use your Mac to manage your homework, too. The software uses a three-panel

interface that will be familiar to anyone who has used iTunes. Smart notebooks let you filter assignments by specific criteria—for example, by due date, priority, or course name. Schoolhouse also tracks assignments, tasks, and class notes; reminds you when papers are due; calculates and graphs grades; and even lets you publish assignments online, via a Classcasting feature that works with .Mac, FTP, SFTP, and WebDAV services. You can also use Schoolhouse to track e-mail requests to your instructor (payment requested; Altered Axis, [www.loganscollins.com](http://www.loganscollins.com)).—PETER COHEN

## UTILITY

### Spanning Sync 1.0.4

The free, Web-based Google Calendar lets you manage your schedule online. Like iCal, it lets you define multiple calendars (to keep work, personal, and family events separate, for example) and subscribe to public calendars, such as sports schedules, holidays, and movie releases. It can even send an SMS message to your mobile phone to alert you to an upcoming event—and unlike iCal, it can do so even when your computer isn't running. Offering the best of both programs, Spanning Sync 1.0.4 (4.0/5) provides two-way synchronization between iCal and Google Calendar without requiring you to reinput data in either place. Enter your Google user name and password into Spanning Sync's preference pane, select one or more iCal calendars, and specify which Google calendar to sync each with. Changes made on either side will be reflected in both places (\$65; yearly subscription, \$25; Spanning Sync, [www.spanningsync.com](http://www.spanningsync.com)).—JK



Schoolhouse 2.1



# Work Faster

## WEB

## 1Passwd 2.4

Most Web browsers can store user names, passwords, and other data, and then automatically put them into Web forms when necessary. But 1Passwd 2.4 (★★★★) extends this capability, letting you store more than one set of information per site, save passwords in one browser and use them in another, and create new passwords whenever you need to. You can even generate, store, and enter the password for a new site, all with a single click. 1Passwd relies on OS X's Keychain technology but uses its own keychain for extra security. In addition, 1Passwd protects you against phishing attempts and keyloggers, and optionally syncs its keychain using .Mac (\$30; Agile Web Solutions, [1passwd.com](http://1passwd.com)).—JK



## PRODUCTIVITY

## FlexTime 1.2

There are plenty of alarm and reminder utilities, but most are designed to alert you to a specific event. FlexTime 1.2 (★★★★), on the other hand, keeps you on track for repeating or periodic activities—such as work breaks, exercises, or file backups. Event schedules include both an interval time and a duration (say, every two hours for ten minutes), and you can have FlexTime perform actions—for example, display or speak a message, play a sound, or run an AppleScript—at the beginning of an event, at the end of an event, a particular number of times during an event, or any combination thereof (\$19; Red Sweater Software, [www.red-sweater.com](http://www.red-sweater.com)).—DF

## ORGANIZATION

## iGTD 1.4

I've used lots of tools to manage my to-do list, but I've never found one with the perfect combination of simplicity and features.



But iGTD 1.4 (★★★★) comes awfully close. Though it's based on the Getting Things Done productivity system, you don't have to be a GTD groupie to use it. Like most to-do software, iGTD lets you sort tasks by project, priority, and due date; like GTD, it also lets you group them by context (where or how you'll accomplish them). You can tag items with keywords, URLs, and contacts, and a menu-bar tool lets you quickly convert e-mail messages and files into to-do items (free; Bartek Bargiel, [bargiel.home.pl](http://bargiel.home.pl)).—DAN MILLER

## PRODUCTIVITY

## iKey 2.2.2

If you find yourself doing the same things over and over on your Mac—or if you prefer to use the keyboard as much as possible—you need a keyboard-automation utility. There are a number of these shortcut utilities, but iKey 2.2.2 (★★★★) occupies a desirable middle ground in terms of price and features. For each shortcut you create, you tell iKey what should happen (a single event or a sequence of events), when it should happen (in which programs or contexts), and what should trigger the action (for instance, a keystroke, a sequence

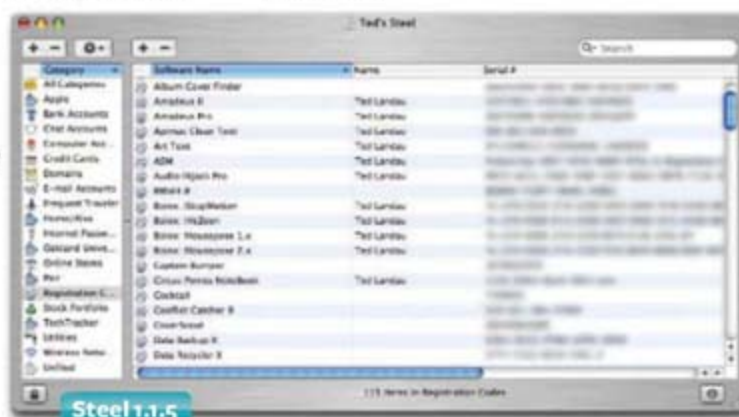
of keystrokes, a scheduled time, or a USB-device action). iKey's range of possible actions is impressive, including launching applications, typing text, copying files, simulating mouse movements, and executing Unix shell commands (\$30; Script Software, [scriptsoftware.com](http://scriptsoftware.com)).—DF

## UTILITY

## Steel 1.1.5

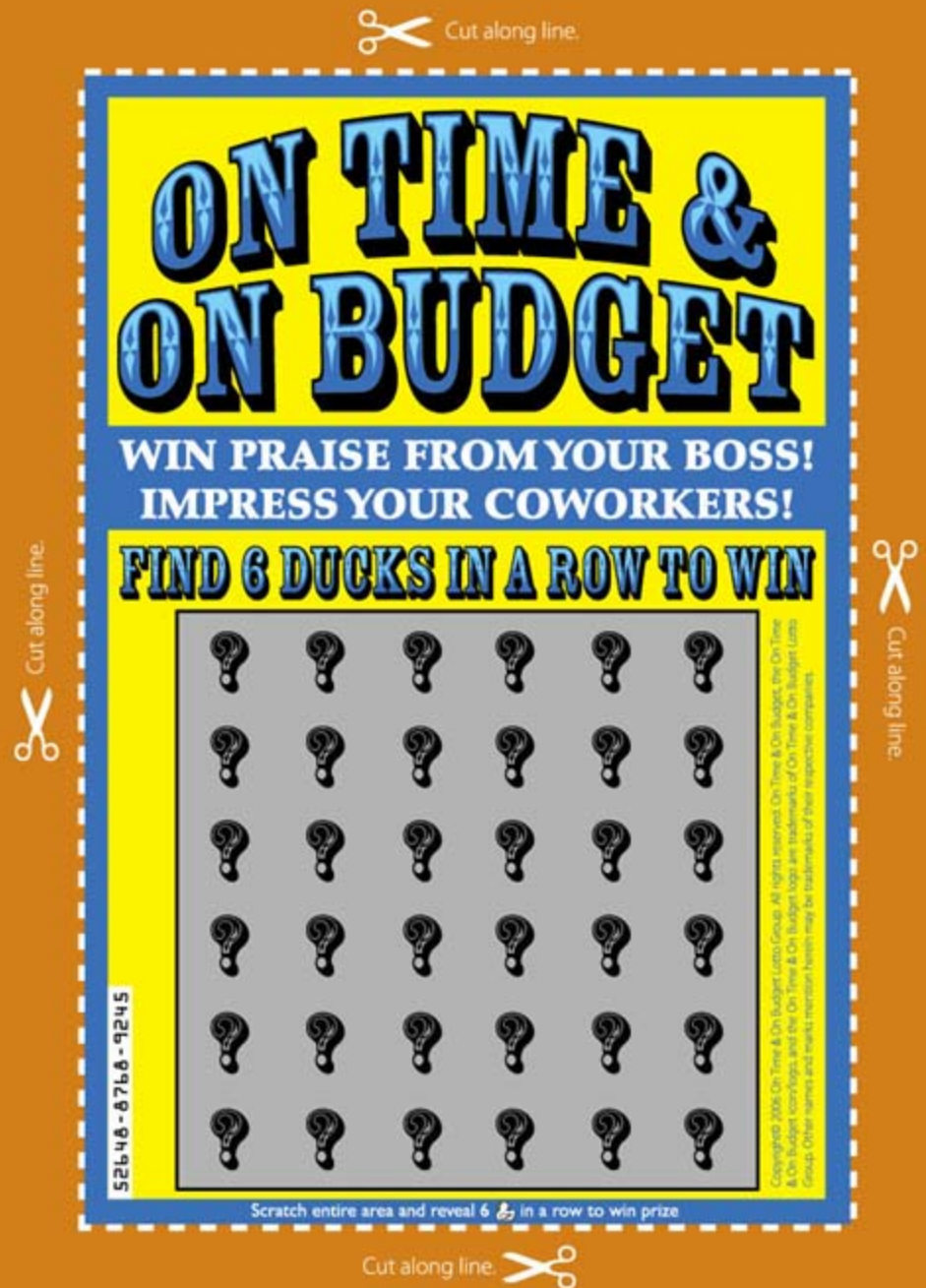
The problem: how to keep track of the dozens of registration codes, passwords, and related data you need to run your digital life. The solution: Steel 1.1.5 (★★★★), a no-nonsense, yet very capable, password-management utility. Steel displays data in a spreadsheet-like format, letting you see many items at once. If you need more assistance, you can use the Find dialog box to zero in on the item you want. You can assign entries to different categories. Each category has specific customizable fields—the e-mail category has fields for POP and SMTP servers, while the credit card category includes a field for the security code. Of course, the Steel database is itself password-protected—so you'll need to remember at least one password without Steel's help (\$9; Gabriele de Simone, [macworld.com/2601](http://macworld.com/2601)).—TL

Jeff Carlson is TidBits' managing editor; Peter Cohen is a Macworld senior editor; Dan Frakes is a Macworld senior editor; Joe Kissel is TidBits' senior editor; Ted Landau is a Macworld senior contributor; Dan Miller is Macworld's executive editor; Dan Moren is a coeditor of MacUser.com; Jonathan L. Seff is Macworld's senior news editor; Jason Snell is Macworld's editorial director; Kelly Turner is Macworld's senior features editor.





For those of you who aren't using OmniPlan,  
may we offer an alternative solution:



Of course, if you'd rather not gamble on the success of your projects,  
consider trying an application built to help you manage tasks,  
resources, and deadlines – all within an intuitive, easy to use interface.



## OmniPlan

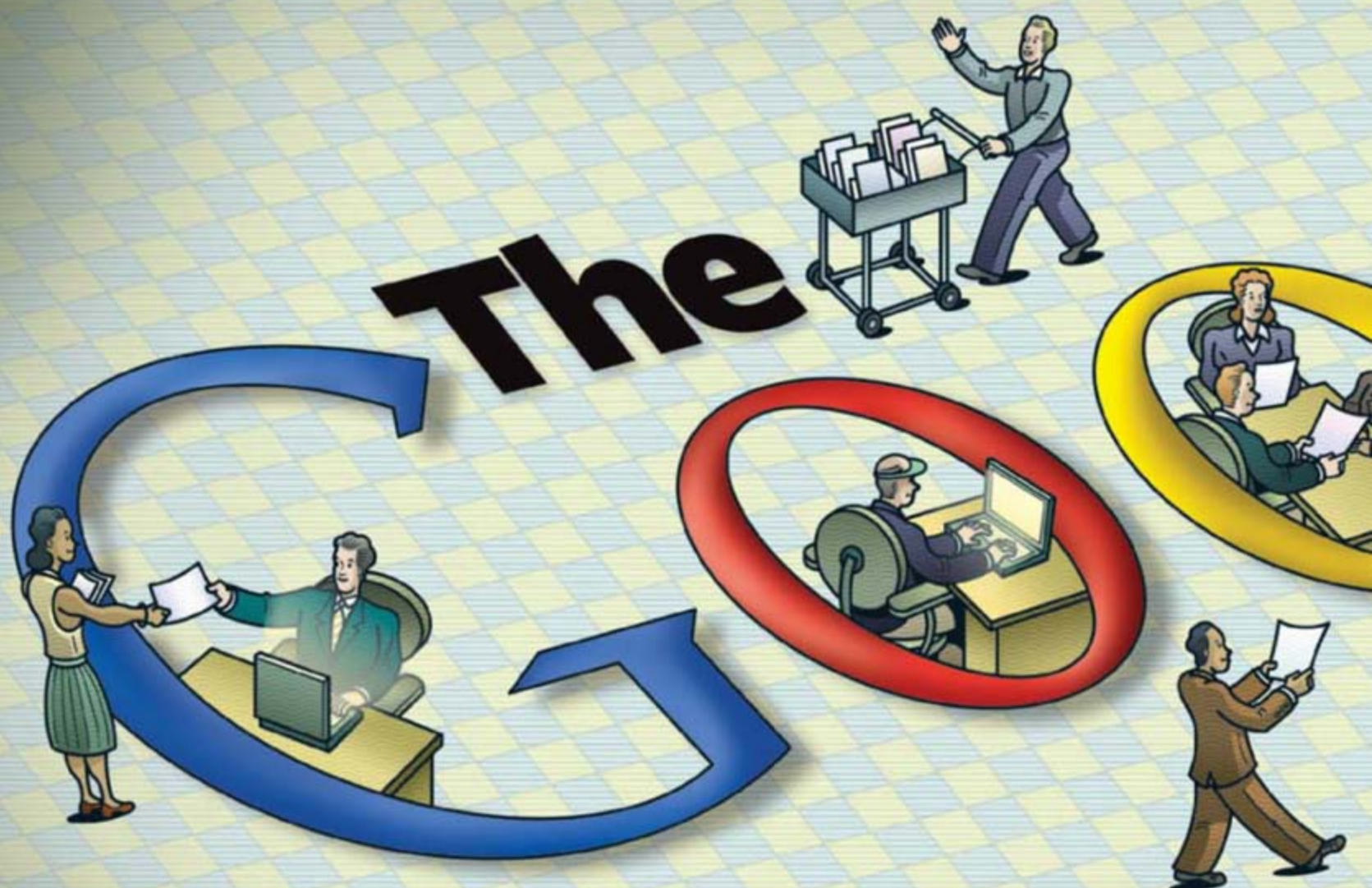
Project planning software for Mac OS X.

Free demo available. [www.omnigroup.com/plan](http://www.omnigroup.com/plan)





» CAN THE WEB GIANT'S SUITE OF  
FREE ONLINE PROGRAMS REPLACE  
YOUR COPY OF MICROSOFT OFFICE?



**INSIDE:**

**Anywhere Wordsmith**  
PAGE 62

**Number Cruncher**  
PAGE 64

**Schedule Master**  
PAGE 67

**Mighty Messenger**  
PAGE 68





Imagine being able to access all your important documents from any computer with an Internet connection—or never having to buy, install, or upgrade office software again. You may already use a Web-based e-mail service instead of an e-mail client, but the next programs to go online could very well be your word processor and your spreadsheet program. You can now get a lot done with only a humble browser.

The idea behind *Web applications* is simple: rather than running on your computer, a Web application runs on a server—you interact with it through your browser. These programs don't need to be updated and maintained on individual computers, and since your files are also stored on a server, you can access them from anywhere without schlepping a disk around.

Google is the biggest and best-known company that's generating buzz for a growing collection of Web applica-

tions. It includes a word processor called Docs and a spreadsheet program called Spreadsheets (both available at [docs.google.com](http://docs.google.com)); a calendar called Google Calendar ([calendar.google.com](http://calendar.google.com)); and, of course, the Web-based e-mail service Gmail ([www.gmail.com](http://www.gmail.com)). The price for all of these programs is a whopping \$0.

**BY JOE  
KISSELL**

Can these Web applications replace your \$399 copy of Microsoft Office? If you have a slow or unreliable Internet connection, the answer is definitely no. But most people who do some word processing or spreadsheet work can benefit from Google's programs—either as a complement to Office or, in some cases, as a replacement.

I'll show you some of the coolest things these programs can do. To use them, you need a Mozilla-based browser, such as Firefox ([www.mozilla.com](http://www.mozilla.com)). You also need a Gmail account or, if you don't want Gmail, a Google account ([www.google.com/accounts](http://www.google.com/accounts)).

ILLUSTRATIONS BY PETER AND MARIA HOEY



# ANYWHERE WORDSMITH

» Until recently, no one would have thought seriously about doing word processing in a Web browser. Sure, you could write and do very basic editing in a big featureless text field, but the tools for working with text were primitive at best. As Google Docs capably demonstrates, those days are over. Docs both handles the basics and offers powerful collaboration features that make it easy to work on documents with other people.

## Using Docs

If you use Microsoft Word, Docs will feel familiar. Docs supports several fonts; multiple text sizes and colors; bulleted and numbered lists; adjustable alignment and indentation; graphics; tables; links; and more. You can edit text by copying and pasting or by dragging and dropping, check spelling (in more than 30 languages), undo and redo multiple edits, and do most of the other things that you'd expect to do in a word processor.

Important features that you won't find include headers and footers, footnotes, text frames, tables of contents, cross-references, and a powerful find-and-replace feature.

**Importing and Exporting** Depending on what you need to do, Docs' lack of advanced text features might not be a problem. Its ability to work with Word, however, will likely be important. That's where the program's importing and exporting features come into play.

Docs lets you import Word documents (.doc), Rich Text files (.rtf), HTML files, plain-text files, and OpenDocument text files (.odt); each file can have a maximum size of 500K. To upload a file, go to the Docs & Spreadsheets home page and click on the Upload link. Then click on Browse, locate the file on your hard drive, and click on Open. (If the file is already accessible on a Web server, enter its URL instead.) Click on the Upload File button. (Complex formatting may be lost when you do this.)

You can also e-mail a file to your account. To do this, go to the Docs & Spreadsheets home page, click on the Upload link, and copy the special e-mail address shown there. Attach a supported file to a new message, and send the message to that address—the file will become a new Docs document.

Alternatively, simply send an e-mail with text in its body to that address; the text will become the new document, and the message's subject will become the file's name. (The e-mail import feature tends to be flaky; your success may depend on which e-mail application and ISP you use, among other factors.)

Files you edit in Docs are stored online in your Google Apps storage space. The system saves your work periodically, as well as whenever you click on the Save button. You can also save files to your Mac in formats including Word, Rich Text, PDF, and HTML. This

cially if you're working on a file with other people—it can be helpful to see what has changed from one version to the next, and who made the changes. Docs isn't compatible with Word's Track Changes feature. (If you import a Word document with tracked changes, all the text in the document—even text that was marked as deleted—shows up in Docs as regular text. Comments entered in Word don't appear at all.) Instead, Docs takes a different approach. Every time your document is saved, manually or automatically, Docs stores a copy of that version. You can go back to any previous version

## Instead of e-mailing files back and forth, with Docs, you edit the same file together online.

makes it easy to create a local backup copy or share a file with someone who needs to edit it in Word. You can also print your documents directly from Docs. However, Docs offers no control over document attributes such as margins, paper size, or page orientation.

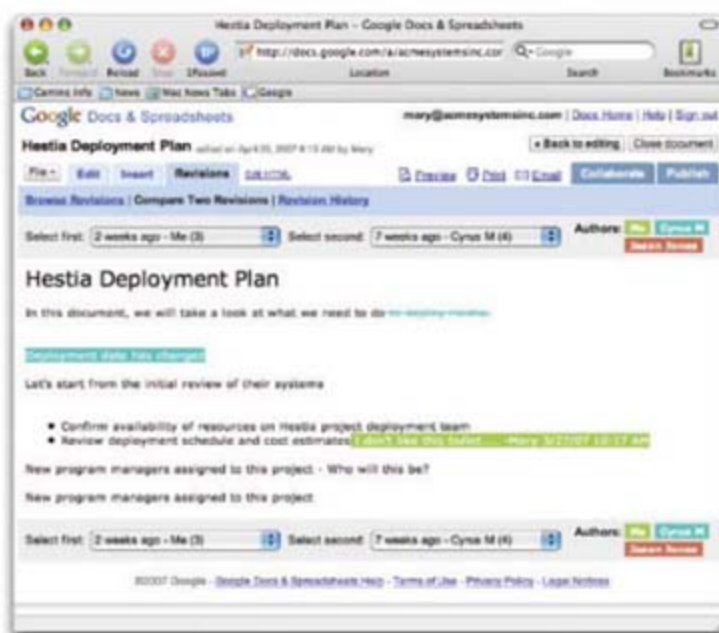
**Tracking Revisions** When you're repeatedly revising a document—espe-

and even compare two versions to see what the differences are. (This is similar to Word's Compare Documents feature.)

To work with revisions, click on the Revisions tab. Select a previous version of the file by choosing it from the pop-up Revision menu. The selected version will appear in the window. To continue using this version, click on Revert To This One, and click on OK when the confirmation alert appears. (You can go back to any of the other revisions later.)

To find out what changed between one version and another, click on the Compare Two Revisions link and select the versions to compare from the two pop-up menus. Text added to or deleted from the newer version appears in a color that indicates who made the change (see "Keep Track of Changes").

**Collaborating** Docs really shines when several people need to work on the same document. Without Docs, you might end up e-mailing files back and forth numerous



**Keep Track of Changes** When using Google Docs' Revisions feature, you can compare any two versions of a document.



times—risking garbled attachments and version conflicts. With Docs, you can all edit the same document together online, thus avoiding those problems.

To grant other people permission to view or edit any document, click on the Collaborate tab, select As Collaborators (to give editing access) or As Viewers (to give read-only access), and enter one or more e-mail addresses. Then click on Invite Collaborators, type a message (optional), and click on Send. Each collaborator will receive a message with that document's URL. Although you can send these messages to any address, collaborators must have a Google account to log in and view or edit the document, and they must sign in using the address you sent the invitation to. The names of people viewing or editing the document appear at the bottom of the screen.

You can also publish your document so that even people without Google accounts can see it. Click on the Publish tab, click on Publish Document, and copy the URL. You can link to this URL from a Web site or e-mail it to anyone who needs to see the document.

## Docs Tips

For anyone familiar with Word, Docs will be mostly self-explanatory. Just

click on the New Document link (or click on an existing document to open it) and start typing. But to get even more out of Docs, try these tips.

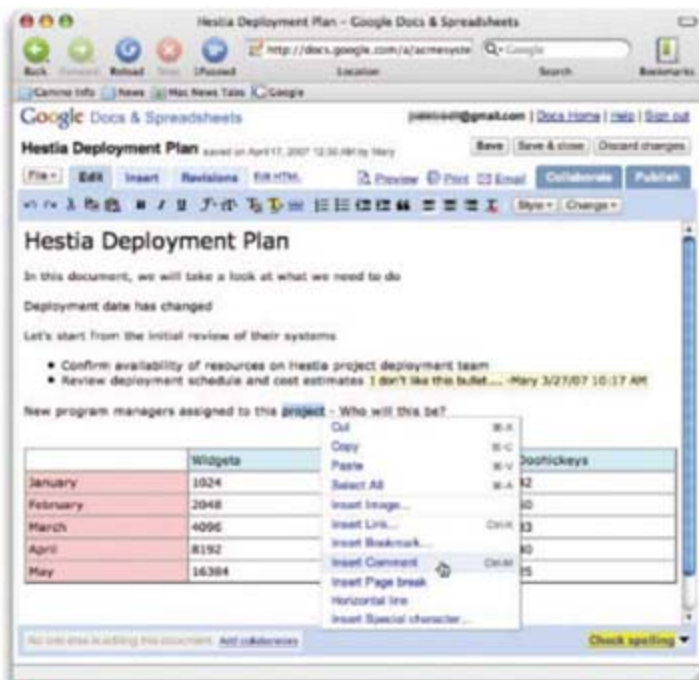
### Save Frequently

Even though Docs saves your work periodically, it doesn't do so as often as Google Spreadsheets does. If your browser crashes or you inadvertently close the window at the wrong time, you could lose your work without warning.

### Discover Hidden

**Options** If you're at a loss for how to perform an action, try right-clicking (or control-clicking) on the document's text or on an element, such as a table or an image. A contextual menu will provide helpful commands (see "Uncover Hidden Commands").

**Publish to Your Blog** Want to publish a document directly to your blog? Don't miss the Post To Blog link on the Publish tab. Once you've entered your



**Uncover Hidden Commands** Google Docs doesn't have many menus, but it does have extensive support for contextual menus. Right-click (or control-click) on a text selection, an image, or a table cell, for example, and a selection of relevant commands appears.

blog site settings, you can quickly get your thoughts online.

**Search Your Files** Use the Google search box at the top of your Docs & Spreadsheets page to search all your documents or the Web. Because it's a Google search, you can use many standard Google features—such as quotation marks to enclose a phrase, or the minus sign (–) to exclude a word from results.

**Use Keyboard Shortcuts** Even though you're working in a Web browser, Google provides some keyboard shortcuts for common tasks within both Docs and Spreadsheets. They use the control key instead of the ⌘ key. For instance, press control-S to save, control-Z to undo, and control-B to make text boldface. (Find the complete list of shortcuts at [macworld.com/2746](http://macworld.com/2746).)

## Is It for You?

Google Docs is great for collaborating with others on a simple document or accessing documents while you're away from your usual computer—say, when you're working in a computer lab. But to use Docs as your *only* word processor, you must always have a reliable high-speed Internet connection. If you need to work on Docs documents offline, you have to use Word, TextEdit, or another common word processor, which means exporting and then reimporting files.

## FOR YOUR EYES ONLY

One big difference between storing your documents on your computer and storing them on Google's servers is that you no longer have complete control over who might see them. What if Google were required to hand over your highly confidential data to the government? What if a Google employee performing routine maintenance stumbled across a spreadsheet outlining your top-secret business plan?

Google's detailed privacy policy spells out the company's guarantee that it will keep your information safe (see particulars for Docs and Spreadsheets at [macworld.com/2750](http://macworld.com/2750), and for Gmail at [macworld.com/2751](http://macworld.com/2751)). Respecting its customers' privacy is certainly in Google's best interest—a well-publicized breach of privacy could result in a significant loss of business. However, it's also true that Google saves many copies of your data in various locations around the world, and that deleting something from your account doesn't immediately delete it from all those backups. Theft, corporate espionage, or actions by a disgruntled employee could put your information into the wrong hands.

You might already trust Google (or another provider) to store your e-mail messages. The risk with data contained in documents and spreadsheets is no greater. However, if you're working with state secrets, confidential medical records, or other sensitive information, storing it online—anywhere—in an unencrypted form is asking for trouble.





# NUMBER CRUNCHER

» If you carry a laptop around just so you can show clients your latest marketing forecasts or call up sales figures at company meetings, you can save yourself some bother by using Google Spreadsheets instead. The program provides editable spreadsheets that are compatible with Microsoft Excel—and, best of all, you and your colleagues can modify them simultaneously.

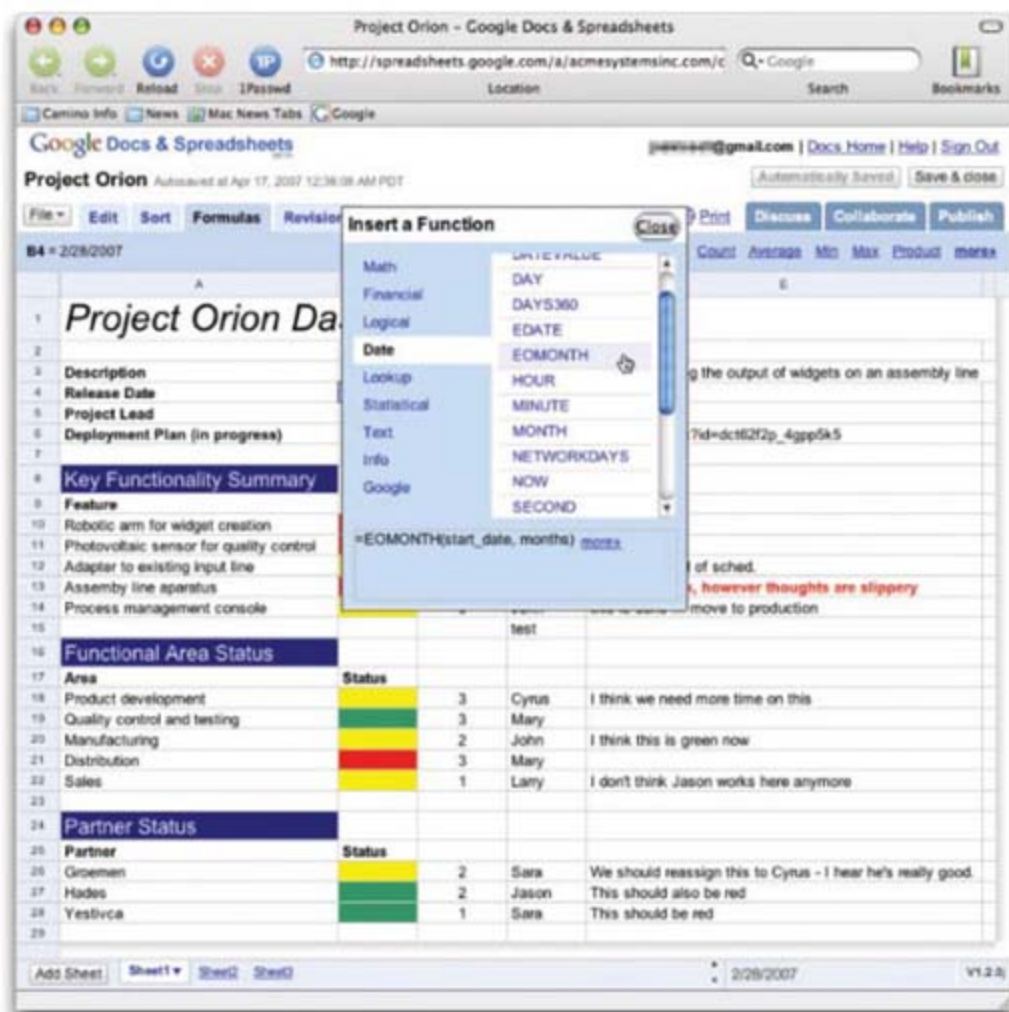
## Using Spreadsheets

When you open a new document in Spreadsheets, you see a standard spreadsheet grid with resizable rows and columns, and the usual array of options for formatting. You enter text or numbers in spreadsheet cells, as you would with any other spreadsheet application. Using icons and menus on the toolbar, you can merge cells; apply borders and highlighting; change fonts, font sizes, and styles; and choose whether to wrap text within a cell. You may miss some of Excel's more-advanced features, but for basic data formatting and calculations, the necessary features are there.

**Formulas and More** You can enter Excel-style formulas manually, or click on the Formulas tab to see links that quickly insert Sum, Count, Average, Min, Max, and Product formulas. For more options, click on the More link to display a pop-up list of hundreds of formulas (see "Hundreds of Formulas"). Hover over a formula name to see its syntax, or click to insert it in the active cell. Spreadsheets lacks advanced Excel features such as macros, PivotTables, auditing, data filtering, and validation.

**Creating Charts** If you need to create a quick visual representation of your data, such as a pie chart or a bar graph, Spreadsheets can help. Begin by selecting the range of cells you want to chart, and then click on the pie-chart icon in the toolbar. Select the type of chart you want to make, and supply any optional data you choose—such as a title, or labels for horizontal and vertical axes. Click on Save Chart. The chart will appear right on top of your spreadsheet; you can move it or resize it by clicking and dragging. Note that although your spreadsheet can include multiple charts, a Spreadsheets chart cannot represent noncontiguous ranges of cells.

**Importing and Exporting** You can upload Excel spreadsheets (.xls), comma-separated text files (.csv), and OpenDocument spreadsheets (.ods)



**Hundreds of Formulas** Google Spreadsheets' formulas are available through this pop-up window, which appears when you click on the More link. Hover over a formula to see its syntax, or click to insert it in your spreadsheet.

in one of two ways (and as with Docs, there is a 500K size limit).

The first method is to go to the Docs & Spreadsheets home page, click on the Upload link, and follow the instructions for uploading a file, just as you would for a text document.

Alternatively, when you're viewing an existing Spreadsheets file, you can choose Import from the File pop-up menu, click on Browse, locate the file on your hard drive, click on Open, and then click on the Open Now link. At press time, importing via e-mail was not available. Also, unlike Docs, Spreadsheets currently has no option that lets you e-mail a finished document directly from the program.

**Working with Multiple Sheets** As in Excel, each document can have multiple sheets. To create a second sheet, click on the Add Sheet button at the bottom of the document window. You can rename or rearrange the current sheet by clicking on its name and choosing Rename, Move Left, or Move Right from the pop-up menu. You can also cut and paste cells from one sheet to another. For best results, use the toolbar's Cut, Copy, and Paste icons.

**Tracking Revisions** The Spreadsheets program automatically saves your work after almost every change, as well as when you click on the Save & Close button. To see any previous version of a file, click on the Revisions tab



and select the version you want from the Revision pop-up menu. Although Spreadsheets tracks revisions, it doesn't highlight specific changes in each version, as Excel's Track Changes feature does, nor does it let you compare two versions, as Docs does.

**Collaborating** Sometimes you need input from several people—for instance, forecasts from the sales department, history from accounting, and strategy from project management. Spreadsheets makes it easy for multiple people to view and edit the same spreadsheet simultaneously. As with Docs, you can publish your spreadsheet to a Web page where anyone can see it. You can also export your spreadsheet in a variety of file formats, and invite other people to collaborate on it with you.

Use the form on the Collaborate tab to invite other people to edit or view a spreadsheet. To make the spreadsheet available to anyone with a Google account, click on Allow Anyone To View. The site produces a URL that you can send to anyone you want. To publish your spreadsheet for anyone to view without logging in, click on the Publish tab and then on Publish Now.

Have a quick question about a spreadsheet change? Because Google's chat program, Google Talk ([www.google.com/talk](http://www.google.com/talk)), is integrated with Spreadsheets, you can have a live chat with every collaborator who's currently viewing or editing the same spreadsheet (see "Spreadsheet Chat"). Click on the Discuss tab to see a list of available collaborators. Type your message into the field at the bottom, and a message pops up on the other users' screens, asking them to join the chat.

## Spreadsheets Tips

Because Spreadsheets shares many interface elements with Excel, most people should be able to pick up the basics without ever looking at the online help documentation. But a few interesting features may not be evident at first glance.

**Look Up Data on the Web** One thing Spreadsheets offers that Excel doesn't is a pair of special functions that rely on Google's extensive index of Web-based information. Access these functions by clicking on the Formulas tab, clicking



## GROUP DYNAMICS

» All the Google applications described in this article are available free, à la carte, to individual users. But Google also offers them in a special package known as Google Apps (formerly called Google Apps for Your Domain). The big difference is that if you own a domain and you sign up for Google Apps, Google can essentially take over hosting your domain's e-mail and Web site—for free or a very low price. You get the full power of Gmail, but with addresses in your own domain name (rather than @gmail.com). And you get all the collaboration features of Docs, Spreadsheets, and Calendar for your group, as well as the ability to add as many users as you wish.

Google Apps comes in three editions. All three give a group administrator the ability to set up user accounts and control how users share various kinds of information within and outside the group's domain. To give the programs a corporate flair, organizations can use their own logo on each page and provide companywide information on each user's start page (see "Custom Apps").

The free Standard Edition is probably what you'll want if you just need to run a small business's Web site or manage your family's domain online. It includes Docs, Spreadsheets, Gmail, Calendar, Google Talk, and Page Creator (an online Web-design program), but it offers less storage (2GB per user) than the Premier Edition and no advanced features such as telephone support or conference-room scheduling. The Premier edition costs \$50 per year—for an entire organization—and adds more e-mail storage space (10GB per user); it also includes telephone support and several other administrative features. The Education edition is free to accredited institutions. It's similar to the Premier edition but includes less storage (only 2GB per user) and gives the option of removing advertisements from students' e-mail. (See [macworld.com/2755](http://macworld.com/2755) for more details about the editions.)

To sign up for Google Apps for a group, visit [www.google.com/a/](http://www.google.com/a/), click on the Get Started button, and follow the prompts. If you don't already own your own domain name, you can search for and purchase one during sign-up for \$10 per year. You can use Google Apps without interrupting your domain's existing Web and e-mail services, but if you want Google to host your domain's e-mail or Web site, you must follow Google's instructions for modifying your DNS records.

**Custom Apps** When you subscribe to Google Apps, you can add your corporate logo to each user's start page; users can also add or rearrange items on their individual pages, including news items, weather reports, and access to company resources (such as a phone directory).





on the More link, and then choosing Google in the Insert A Function box.

The first function, GoogleFinance, gives you an easy way to insert dynamic information about publicly traded companies and mutual funds. For example, you can enter `=GoogleFinance("AAPL", "marketcap")` in a cell to display Apple's current market capitalization. You can access stock prices, mutual-fund net asset values, and many other types of data with this function.

The second function, GoogleLookup, lets you insert a wide variety of statisti-

cal data that can be inferred from Web searches. This formula takes two arguments—an entity (what you want information about) and an attribute (the information you want about the entity). Entering `=GoogleLookup("France", "population")` in a spreadsheet cell, for example, displays the current population of France (a little over 63,000,000). Entering `=GoogleLookup("Halle Berry", "place of birth")` gives a result of *Cleveland, Oh*, and typing `=GoogleLookup("platinum", "atomic weight")` displays 195.084(9) g·mol.

## Spreadsheets lets you tap into Google's extensive index of Web-based information.

GoogleLookup can't display every piece of information you may want, but it can make entering some data much easier.

**Fill In a Range of Values** Spreadsheets doesn't have a feature comparable to Excel's AutoFill, which intelligently extends a series into new rows or columns. But it does have a limited fill feature for columns. Start by entering a formula that refers to the cell immediately above it. For example, suppose cell D1 contains the value 18. Enter a formula—for instance, `=D1+1`—in cell D2. Then select (using the mouse or keyboard) cell D2 (but not D1) and a few cells below it. Press control-D, and Spreadsheets applies the formula you entered to all the selected cells—if you entered `=D1+1`, cells D3 through D5 would contain 20, 21, and 22.

**Put Part of a Spreadsheet on a Web Page** Sometimes you may want to embed just a portion of a spreadsheet in a Web page (or in, say, a blog entry), rather than providing a link to

the whole file. To do this, go to the Publish tab and click on Publish Now. Next, click on the More Publishing Options link, which opens a new window. From the File Format pop-up menu, choose HTML To Embed In A Webpage.

Select the sheet containing the cells you want to publish, and enter a range of cells on that sheet (such as `A1:D5`). Click on Generate URL, and copy the code that appears in the box. Paste this code into your blog or Web page to display the selected portion of your spreadsheet there. (If you select the Publish tab's Automatically Update Every 5 Minutes option, the spreadsheet copy on your blog or Web page will dynamically reflect changes made to your spreadsheet, without manual intervention.)

## Is It for You?

Google Spreadsheets is a good choice for maintaining everything from shopping lists to product-launch plans, especially if you want several people to be able to view or modify them. And even though it lacks some of Excel's flashier features, Spreadsheets can crunch numbers—including highly complex formulas—with the best of them. For traditional spreadsheet tasks such as tracking sales figures or account balances, Spreadsheets is a perfectly capable application. It's also a good option for people who want basic spreadsheet capabilities but can't afford Excel, or who often need to do quick calculations when they're away from their regular computers—while traveling, for example.

Just like Docs, however, Spreadsheets is useless when you're not connected to the Internet. And if you need high-powered features, you'll have to turn to Excel or another full-featured spreadsheet application.

The screenshot shows a Google Spreadsheets interface with a spreadsheet titled "Project Orion Dashboard". The spreadsheet has several sections: "Description", "Release Date", "Project Lead", "Deployment Plan", "Key Functionality Summary", "Functional Area Status", and "Partner Status". The "Key Functionality Summary" section includes a table with columns for Feature, Status, Priority, Owner, and Comments. The "Functional Area Status" section includes a table with columns for Area, Status, Priority, Owner, and Comments. The "Partner Status" section includes a table with columns for Partner, Status, Priority, Owner, and Comments. On the right side of the spreadsheet, there is a "Chat about this spreadsheet" window showing a conversation between "mary" and "joe.kissell".

Feature	Status	Priority	Owner	Comments
Robotic arm for widget creation	Green	2	John	
Photovoltaic sensor for quality control	Yellow	3	Larry	on vacation
Adapter to existing input line	Yellow	3	Shawn	2 weeks ahead of sc
Assembly line apparatus	Red	10	Adonal	Read the book, how
Process management console	Yellow	0	John	this is done ... move

Area	Status	Priority	Owner	Comments
Product development	Yellow	3	Cyrus	I think we need more
Quality control and testing	Green	3	Mary	
Manufacturing	Yellow	2	John	I think this is green
Distribution	Yellow	3	Mary	
Sales	Yellow	1	Larry	I don't think Jason is

Partner	Status	Priority	Owner	Comments
Groeman	Yellow	2	Sara	We should reassign
Hades	Yellow	2	Jason	This should also be
Yestivica	Green	1	Sara	This should be red
Mike	Green			Finished

**Chat about this spreadsheet**

Viewing now:  
mary  
joe.kissell

me: Do you think we should increase the priority of product development?  
joe.kissell: Absolutely. That box needs to be a much prettier color. In fact, I'm going to vote for purple instead of green.  
me: Purple sort of breaks the "traffic signal" metaphor, but I'll upgrade the priority.  
joe.kissell: Thanks.  
me: I notice that the release date has slipped. What's the latest?  
joe.kissell: I'm thinking August.

Please enter to send your message:  
OK, why don't you change the projections in the other sheets?

**Spreadsheet Chat** Multiple people can not only edit a Google Spreadsheets document simultaneously, but also carry on a live chat while doing so. All collaborators who are currently viewing the spreadsheet appear in the Discuss tab.



# SCHEDULE MASTER

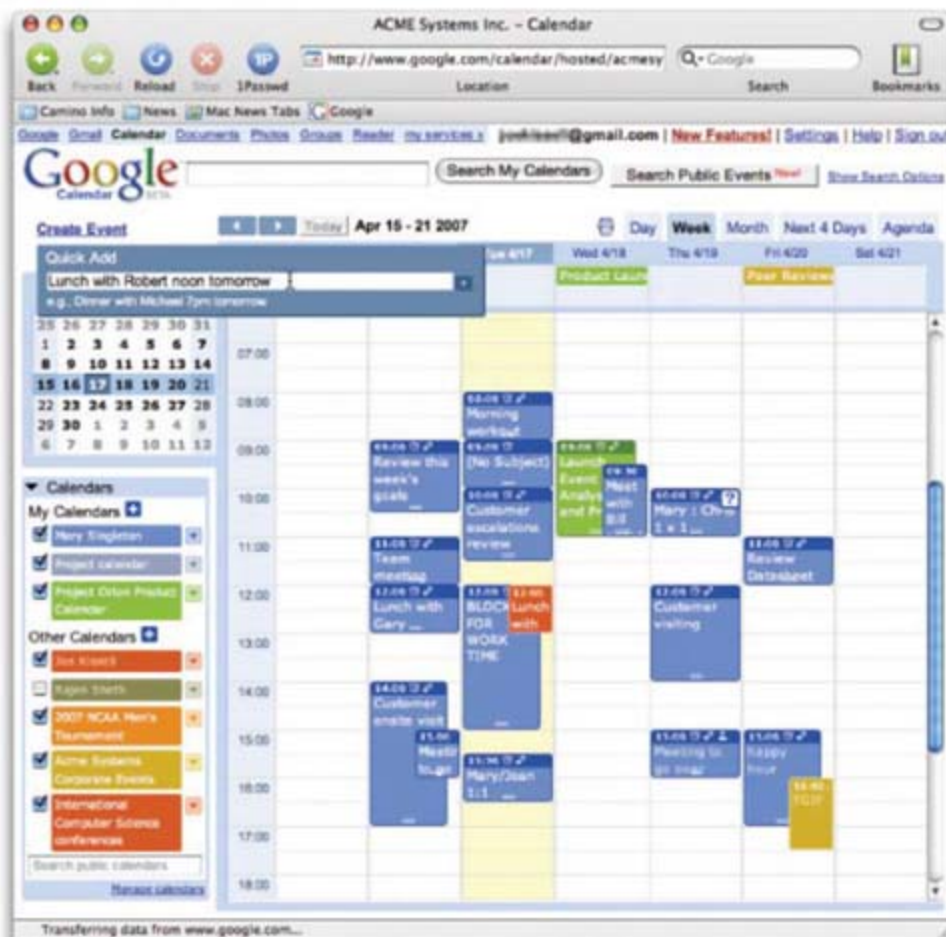
» Google Calendar is very much like an online version of iCal. You can store events such as appointments and birthdays; set up meetings that you invite other people to attend; make events repeat on a schedule; view your events by day, week, month, or other time periods; set alarms; publish your calendars so that others can see your events (even in iCal!); and subscribe to public calendars such as lists of holidays and sporting events. And as in iCal, you can move an event simply by dragging it to a new time or day on the calendar.

## Calendar Tips

Learning Calendar is easy. But these tips may help you put it to better use.

**Use the Quick Add Feature** You can add a new event by clicking on the Create Event link and filling out the form with all the details, but for many events, there's an easier way. Click on the Quick Add link, type in a brief description, and press return (see "Fast Scheduling"). Calendar tries to turn your description into a specific date and time. For instance, type **Mireille's birthday on Thursday**, and Calendar immediately adds that event on the next Thursday. Since you didn't specify a time, the event is entered as an all-day event. If you enter **Lunch with Robert noon tomorrow**, Calendar blocks out a one-hour lunch beginning at noon tomorrow.

**Subscribe to Public Calendars** In addition to tracking meetings and appointments, Calendar (like iCal) lets you subscribe to calendars containing sports schedules, phases of the moon, holidays, and other events you may care about. To subscribe to one or more of these calendars, click on the plus-sign icon (+) next to Other Calendars in the Calendars box. Then go to the Browse Calendars tab, and choose from among numerous calendars maintained by Google. Or go to the Search Public Calendars tab, and type in search terms (such as **movie releases**) to find



**Fast Scheduling** Using the Quick Add field, you can add an event to your calendar without having to fill out a whole form.

matching calendars. When you find a calendar on either tab that you want to use, click on Add Calendar.

**Try Cell Phone Notification** By default, when you're logged in to Google Calendar, reminders of upcoming events pop right up on your screen. You can also choose to have reminders e-mailed to you or SMS notifications sent to your cell phone.

To set this up, click on the Settings link at the top of the page, and go to the Mobile Setup tab. Enter your cell phone number in the Phone Number field, choose your carrier from the list, and click on Send Verification Code. Calendar will send you an SMS message containing a numeric code. Enter that code in the Verification Code field and click on Finish Setup. Verify that

the SMS Event Reminders option is selected, and click on Save. From now on, you'll get SMS reminders of upcoming events (ten minutes ahead of time).

## Is It for You?

Google Calendar has most of the major features found in high-end corporate scheduling systems, but its interface is as understandable as iCal's. So it makes for a fine all-purpose calendar program. If you need to share calendar information with others, Calendar gives you a great deal of flexibility. And unlike iCal, it can remind you of upcoming events even when your computer is turned off.

Still, cell phone notification notwithstanding, Calendar isn't the best place to keep your schedule if you spend a lot of time disconnected from the Internet.





# MIGHTY MESSENGER

Google wasn't the first company to offer free e-mail accounts that you could access in a Web browser. But Gmail provides an unusually hefty amount of storage (at least 2.8GB per user), excellent spam filtering, and the convenience of fast, reliable Google searching through all those gigabytes of stored e-mail. Plus, you get all this in exchange for nothing more than some small, relevant, and unobtrusive text ads that appear near your messages in your browser window.

## Using Gmail

Gmail has many (though by no means all) of the same capabilities as a desktop e-mail client such as Apple Mail or Microsoft Entourage. You can sort your messages with filters, categorize mail with labels, and compose fully formatted HTML messages. And because Gmail is a Web application and your messages are stored on Google's servers, you can access your messages from any Web browser.

**Application Hopping** Gmail is well integrated with the other Google applications, too. For example, if you receive an e-mail message with an attached Word or Excel file, you can click on it to open it directly in Docs or Spreadsheets. If you receive a meeting invitation, you can add it directly to your Google Calendar; you can also create a meeting request while composing a new e-mail message and add it to your calendar at the same time.

**Chatting with Friends** Gmail is integrated with Google Talk, which means that you can reply to an e-mail message with an instant message if the sender is online, and you can do so without even having to open a new window. Transcripts of all your chats and e-mail messages are saved (and searchable).

## Gmail Tips

Gmail has lots of tricks up its sleeve, and learning about some of them can make your life easier. Here are my favorites.

**Use Keyboard Shortcuts** Like Docs and Spreadsheets, Gmail offers an extensive array of keyboard shortcuts—such as C for Compose Mail and R for Reply—but they're disabled by default. To turn them on, click on the Settings link at the top of the Gmail window. Go to the General tab, select the Keyboard Shortcuts On option, and click on the Save Changes button. When you return to your inbox, you'll see a few sample keyboard shortcuts (for a complete list, see [macworld.com/2746](http://macworld.com/2746)).



**Label It** Use Gmail's labels—descriptive words or phrases—to help you locate e-mail messages related to a specific project or topic. To apply a label, select one or more messages and choose the label name from the More Actions pop-up menu.

**Use the Archive Button** Even though Gmail makes it easy to search through gigabytes of e-mail, there's no reason to let every single message you've ever received clutter your inbox. Once you've read, replied to, or dealt with a message, select it and click on Archive. This moves the message out of your inbox, without putting it in a specific mailbox. (To see all your messages, even the archived ones, click on the All Mail link.)

**Label Your Messages** Google's searching is good, but sometimes it isn't as smart as you might like—for instance, when you have 985 messages that include the words *Apple* and *Jobs*, but you need to find the few that pertain to your search for employment in Cupertino.

Labels can help. These text tags let you group messages by topic, and they take the place of a hierarchy of folders or mailboxes. They make searching easier and more accurate, too. To create a new label, click on the Edit Labels link in the Labels box. Type a label name in the Create A New Label field, and click on Create. To apply a label to the current message or selected messages, select the label from the More Actions menu (see "Label It").

**Help Google Fight Spam** Gmail has an excellent spam filter, which routes suspected spam into your Spam mailbox. If a spam message gets through to your inbox, be sure to select it and click on Report Spam; this helps Google improve its spam-filtering accuracy.



**Forward Mail to Your Phone** In most e-mail programs, filters (or rules) based on messages' senders, subjects, or contents are used to file messages into mailboxes. In Gmail, you can use filters to label your mail, but a more interesting use is to forward selected messages to your cell phone as SMS messages. (Most cell phone carriers provide a special format for converting your cell phone number into an e-mail address; see [macworld.com/2747](http://macworld.com/2747) for a list.)

Click on the Create A Filter link at the top of the Gmail page. Now fill in some criteria for messages that you

ing all your messages in sync. You'll also waste a lot of space storing all those messages on your hard drive. Instead, try installing Google Desktop (🔗; [macworld.com/2748](http://macworld.com/2748)), a free new desktop search utility. One thing it does is index your Gmail messages and cache them locally in a highly compact form, so you can search and read your Gmail messages even when your computer is offline.

### Is It for You?

Gmail is reliable, versatile, and easy to access from almost anywhere. If you're

## Using Gmail as a secondary e-mail address is a no-brainer.

want forwarded to your phone. Keep in mind that you should do this with only a small number of brief messages, so choose your criteria accordingly—for example, mail from your spouse with the word *urgent* in the subject line. Then click on Next Step, select Forward It To, and enter your cell phone's e-mail address. Click on Create Filter. Now, to test the filter, send yourself a message (or have someone else send one) that meets the criteria you entered.

**Take Gmail with You** Like any Web-based e-mail service (and like the other Google Web applications), Gmail works only when you're connected to the Internet. Sure, you could set up POP access to your account through your favorite e-mail client, but then you might encounter problems keep-

ing using other Google programs heavily, it can also help you by allowing you to switch applications less frequently. Still, it won't work for everyone. Although it's possible to access your Gmail messages when you're offline (using Google Desktop or a POP client), you lose all integration with other Google applications. That makes Gmail less than ideal for people who need to spend a great deal of time without Internet access.

Regardless, using Gmail as a secondary e-mail address is a no-brainer. It makes for a convenient backup if you have trouble accessing your main account. ☒

**Joe Kissell** is the senior editor of TidBits ([www.tidbits.com](http://www.tidbits.com)) and the author of *Real World Mac Maintenance and Backups* (Peachpit Press, 2007).

## 4 EXCELLENT ADD-ONS

Wish Google Apps could do more? A piece of add-on software might help. Here are four of my favorites.

**1 Address Book to CSV Exporter** (free; [www.antonioleone.net](http://www.antonioleone.net)) exports your OS X Address Book in comma-delimited format so you can import it into your Gmail account. Note that this doesn't solve the problem of syncing your contacts—if they change, you'll have to import them again.

**2 gDisk** (free; [gdisk.sourceforge.net](http://gdisk.sourceforge.net)) lets you put ordinary files and folders in your access-from-anywhere Gmail storage space. That means you can use your Gmail account as a convenient backup location when you're on the road.

**3 Google Notifier** (free; [macworld.com/2752](http://macworld.com/2752)) displays alerts in your menu bar when you have an upcoming event in Google Calendar or new messages in your Gmail inbox. If you're using the Google Apps package for your domain, a third-party utility called Google Hosted Mail Notifier ([macworld.com/2753](http://macworld.com/2753)) can alert you to waiting e-mail messages.

**4 Spanning Sync** (one-time purchase, \$65; yearly subscription, \$25; [www.spanningsync.com](http://www.spanningsync.com)) lets you perform two-way synchronization between your iCal calendars and Google Calendar.

## BEYOND GOOGLE

Although Google is the big name in free Web-based office tools, it's not the only game in town. Here are some similar programs.

PRODUCT	WORD PROCESSING	SPREADSHEETS	E-MAIL	CALENDAR	CHAT	PRESENTATIONS	WEB-PAGE CREATION	PROJECT MANAGEMENT	COMMENTS
<b>Glide</b> <a href="http://glidesociety.com">glidesociety.com</a>	●	○	●	●	●	●	●	○	Offers a large collection of free online services delivered in a rather cumbersome Flash-based interface.
<b>iNetWord</b> <a href="http://www.inetword.com">www.inetword.com</a>	●	○	○	○	○	○	○	○	Reasonably full-featured Word-compatible online word processor.
<b>ThinkFree Online Office</b> <a href="http://www.thinkfree.com">www.thinkfree.com</a>	●	●	○	○	○	●	○	○	Word processor and spreadsheet programs are closer to Word and Excel in functionality than Google's.
<b>Zoho Office Suite</b> <a href="http://zoho.com">zoho.com</a>	●	●	○ <sup>a</sup>	●	●	●	● <sup>b</sup>	●	This suite is generally considered to be Google Apps' primary competitor.

● = yes, ○ = no. <sup>a</sup>At press time, this feature was in private beta testing. <sup>b</sup>For creating forms and online database applications, not generic Web sites.



# Fix Password Glitches

Keychain on the blink? Forgotten a password? Here's what to do. **BY JOE KISSELL**

Is password overload getting to you? With banks, e-commerce sites, and discussion forums—not to mention Mac OS X—all requiring logins and passwords, it's becoming increasingly difficult to keep a handle on everything. Of course, as the number of passwords you use increases, so does the possibility that something will go wrong. From misbehaving keychains to simple forgetfulness, password problems can cause untold grief. Here are six common glitches and how to overcome them.

### 1. Corrupt Keychain

**Problem:** I keep getting prompts to enter my password, even though I know it's in my keychain.

**Solution:** Mac OS X's Keychain provides a handy way to store user names and passwords for servers, Web sites, and other resources. Usually it works invisibly in the background. However, if the keychain file becomes damaged, you may not be able to save new passwords, or an application such as Apple's Mail or iChat might ask you to enter a password you've already stored. A corrupted keychain can even cause applications to crash.

If you suspect that you have a damaged keychain, open the Keychain Access application (/Applications/Utilities/) and choose Keychain Access: Keychain First Aid. In the box that appears, enter your login password and select either the Verify option, which merely checks the keychain, or Repair, which checks for and fixes errors. Click on Start. Keychain First Aid reports any errors that it finds and repairs.



### 2. The Same-Password Blues

**Problem:** I know it's safer not to keep using the same password. But it's hard to come up with new passwords all the time.

**Solution:** Although many people reuse the same password for various purposes, it's more secure to make each password unique. You don't have to exert mental energy on this job—your Mac can come up with ideas for you. It can also give you tips for improving passwords you already have.

Mac OS X includes a password-generator tool called Password Assistant, but you can access it only at certain times—for example, when you're setting up a new account in System Preferences or creating a new keychain in Keychain Access. (You'll see a key icon next to the field where you're supposed to enter a password. Click on

this icon to access the tool.) Take full advantage of this tool's powers by using codepoetry's free Password Assistant ([macworld.com/2768](http://macworld.com/2768)), which lets you access Password Assistant as a stand-alone program. The codepoetry application works only with OS X 10.4 (Tiger). If you haven't upgraded, try David Kreindler's free RPG ([macworld.com/2769](http://macworld.com/2769)), which works similarly and runs on Mac OS X 10.3 (Panther).

Password Assistant lets you set the password's length via a slider and adjust its complexity via the Type pop-up menu (see "Choose Secure Passwords"). For example, choose Letters & Numbers; Memorable, which mixes common words with numbers and punctuation; or Random, which includes letters, numbers, and special characters. If you don't like the first suggestion, pick another from the Suggestion pull-down menu. Or generate another set by changing a setting or selecting More Suggestions from the Suggestion menu.

You can also use Password Assistant to test your own passwords. Type one in the Password field. The tool rates the password's quality and gives you tips for improving it.

### 3. Autofill Won't Fill

**Problem:** My Web browser is supposed to autofill my passwords, but sometimes it refuses to comply.

**Solution:** Apple Safari, Mozilla Firefox, and most other popular browsers can remember user names and passwords for Web forms and fill them in at your command. To turn this feature on in Safari, choose Safari: Preferences and select User Names And Passwords under



AutoFill. In Firefox, go to Firefox: Preferences, click on Security, and enable the Remember Passwords For Sites option.

However, autofill doesn't always do the job. For example, as a security measure, some sites block auto-completion of certain fields. Also, if you have multiple user names and passwords for a particular site, your browser can't tell which one to use.

You can solve such problems with a third-party password utility. My favorite is Agile Web Solutions' \$30 iPasswd ([ipasswd.com](http://ipasswd.com)), which uses Apple's Keychain for storage, but provides plug-ins for most popular browsers (like Safari, Firefox, the Omni Group's OmniWeb, and Mozilla's Camino). Once you enter a Web password, the application remembers it for every supported browser. It also adds a menu to each browser's toolbar (see "Manage Browser Passwords"). This includes commands for generating new passwords, as well as options that let you choose from multiple user name and password sets for a single site. If your browser's autofill isn't working for you, iPasswd is definitely worth a shot. (For more on iPasswd, see "Software Treats," page 46.)

#### 4. Master Password Mind Block

**Problem:** I entered a Master Password when I set up FileVault, but I've since forgotten it.

**Solution:** Introduced in OS X 10.3, FileVault provides a way to encrypt your entire user folder. When you first configure FileVault in the Security prefer-

## CHECK IT OUT

### Back to (Virtual) School



How do you integrate technology into classrooms or corporate training programs if you're not a technical wizard? More and more educators are turning to Moodle ([www.moodle.org](http://www.moodle.org)). This free, open-source course-management software makes it easy for teachers to create password-protected Web sites where students can access class information and assignments, take timed quizzes, submit papers, and share knowledge in chats and wikis (pages where students can add and edit the content themselves). Once an administrator has installed Moodle on a Mac, Windows, or Linux server, teachers can log in using a Web browser and select from a wide range of options for designing lessons and assignments—no HTML or programming skills required. If you don't want to administer a site yourself, several companies offer Moodle hosting and support for a fee (see [macworld.com/2770](http://macworld.com/2770)). At press time, there were 26,000 registered Moodle sites containing more than 1,078,000 courses. You can explore a number of demonstration courses at [macworld.com/2771](http://macworld.com/2771). —SCHOLLE SAWYER MCFARLAND

ence pane, you're prompted to enter a Master Password. This password allows you to access the encrypted files even if you forget your login password (though if you forget both passwords, there's no way to recover the files).

In order to change your Master Password in the Security preference pane, you must enter the original password. So if you've forgotten it, you'll have to delete the FileVault keychain. First, if FileVault is currently on, disable it (go to the Security preference pane and click on Turn Off FileVault). Locate the two files in /Library/Keychains (the root-level Library folder, not the one in your user folder) that begin with the words

*FileVaultMaster*, and drag them to the Trash. (You'll have to enter an administrator password.) Note that if you delete this keychain—and you've forgotten the login password of the FileVault-protected account—you will not be able to access encrypted files by setting up a new Master Password.

#### 5. Admin Absentmindedness

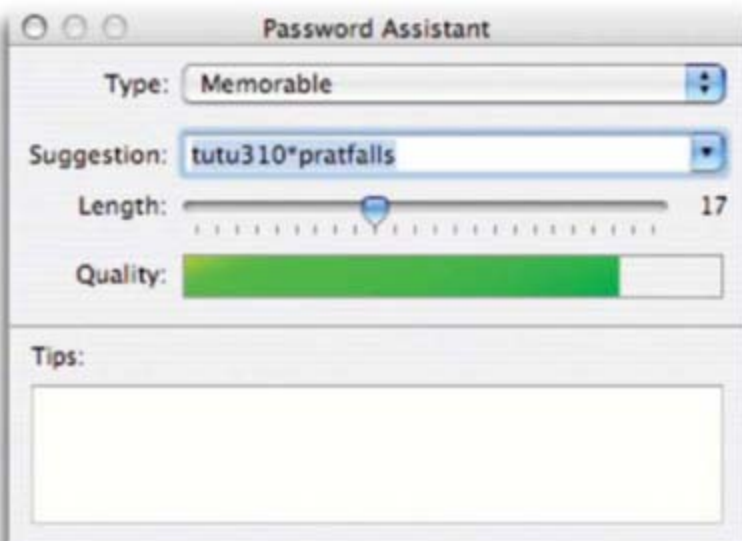
**Problem:** I've forgotten my Mac's administrator password.

**Solution:** If you can't remember your administrator password—or you don't know it because you've recently purchased or inherited someone else's machine—you'll have to reset it. There are a couple of ways to reset an administrator password:

**Ask Another Administrator** If your Mac has a second administrator account, open the Accounts preference pane. Click on the lock icon at the bottom and have that person enter his or her administrator name and password. Select the user with the forgotten password and click on Reset Password to choose a new one.

**Use an Installation Disc** Insert your OS X installer disc. To restart from it, hold down the C key while you reboot your Mac. Choose a language as requested, and then go to Utilities: Reset Password. Select your main disk and choose your user name from the pop-up menu. Enter and verify a new password, then click on Save. Quit the Reset Password utility, and then quit the installer and click on Restart to boot up from your hard disk.

If you previously set your keychain password to match your administrator password, the keychain probably won't unlock automatically when you log in (since it still uses your old password). So just delete it and create a new one.



**Choose Secure Passwords** Apple's Password Assistant makes it easy to choose memorable yet secure passwords.



Launch Keychain Access. To delete a keychain, make sure the keychain list is showing in the upper left corner of the window; if it isn't, click on the Show Keychains button at the bottom. Select the keychain you want to delete and choose File: Delete Keychain *keychain name*. Select File: New Keychain, choose a name, enter a password, and click on Create. In the list, select the keychain you've just created, and choose File: Make Keychain *keychain name* Default. Whenever you store a new password, Mac OS X will automatically add it to your default keychain.

Note that just as you can reset your administrator password, so can anyone else with physical access to your Mac and an installer disc. To minimize your risks, take extra security precautions such as making your keychain password different from your login password and storing sensitive files in an encrypted disk image. See [macworld.com/2536](http://macworld.com/2536) for more details.

## 6. AirPort No-Go

**Problem:** I can't remember the passwords for my network or AirPort base station.

**Solution:** If you use an AirPort base station (or a third-party wireless router), you potentially have two passwords to worry about: the wireless network password, which your com-

puter needs to get online, and the base station password, which protects the base station against modification by unauthorized parties. You don't have to set either password, but it's a good idea to do so.

Most people store their wireless network password in their keychain so OS X can enter it automatically. But if you switch computers or want to grant a friend access to your network, you'll need to know that password. To find it, open Keychain Access and type the first few letters of your network's name into the Search field. Double-click on the match with the

## What Makes a Password Secure?

When creating new passwords, most people know they should avoid using their pet's or spouse's name and should include a mix of capital and lowercase letters, numbers, and special characters. But just how long and complex does a password really need to be? Here are some rules of thumb:

**Low-Security Passwords** If you're creating a password simply to identify yourself, and little is at stake if it's compromised (for example, on a Web site's discussion forum), choose a memorable pattern with eight or nine characters. Include one or more non-alphanumeric characters (for example, *oak7\*fid*).

**High-Security Passwords** If you're protecting bank accounts or personal records, it pays to be safe. Choose a random password or a memorable, word-based one. If you choose a random password, use a mix of 10 or 11 letters (capital and lowercase) and numbers (for instance, *15oqMqQk8xn*). If you include punctuation, 9 or 10 characters are adequate (such as *@wF?FHbZl*). For memorable passwords, use at least 17 characters, including letters, numbers, and punctuation (as in *acme13-shortbread*).

word *login* (or your user name) listed in the Keychain column. In the box that appears, select the Show Password option, enter your keychain password, and click on Allow Once or Always Allow to display the password.

If your network's password isn't there, you'll need to select a new one in AirPort Admin Utility (or AirPort Utility, if you have the new 802.11n base station). That, in turn, requires that you either know the base station's password (if it has one) or have it stored in your keychain.

To change the wireless network password on older base stations, open AirPort Admin Utility (/Applications/Utilities) and double-click on the base station's name. In the AirPort tab, click on Change Wireless Security. Type a new password and click on OK and then on Update. For 802.11n AirPort Extreme Base Stations, open AirPort Utility, select the base station's name, and choose Base Station: Manual Setup. Click on the AirPort icon, and then select the Wireless tab. Enter and verify a new password, choose an encryption method from the Wireless Security pop-up menu, and click on Update.

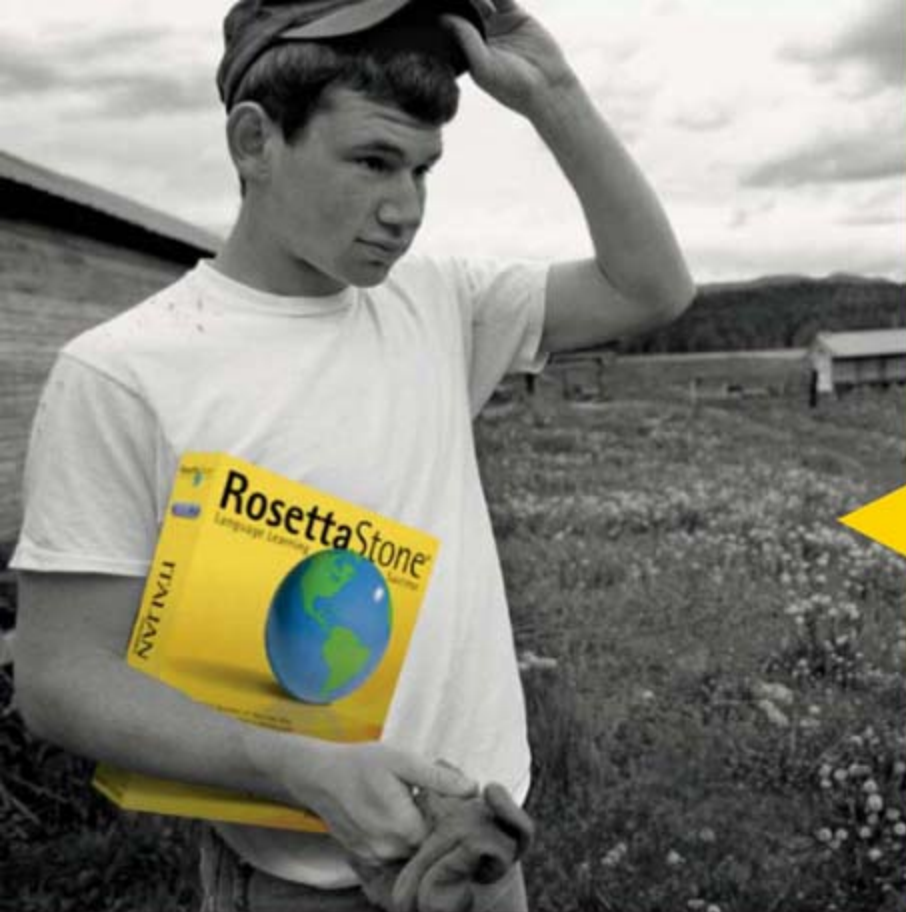
What if you've forgotten the base station's password too? Then it's time to reset it. Instructions vary by base station, so go to Apple's AirPort Support page ([macworld.com/1291](http://macworld.com/1291)) and do a search for *Reset AirPort* to find your model. ❌

**Joe Kissell** is the senior editor of TidBits and the author of the e-book *Take Control of Passwords in Mac OS X* (Take Control Books, 2006).



**Manage Browser Passwords** 1Password adds a pop-up menu to most browsers, so you can quickly generate passwords or fill in forms.





**He was a hardworking farm boy.**

**She was an Italian supermodel.**





**He knew he would have just one chance to impress her.**

**Rosetta Stone®. The fastest and easiest way to learn ITALIAN.**

Arabic	Dutch	Farsi	Greek	Indonesian	Korean	Polish	Spanish (Latin America)	Swedish	Turkish
Chinese	English (UK)	French	Hebrew	Italian	Latin	Portuguese	Spanish (Spain)	Tagalog	Vietnamese
Danish	English (US)	German	Hindi	Japanese	Pashto	Russian	Swahili	Thai	Welsh

**Learn a language. Expand your world.** Finally, there's a way to learn a new language that's easier than you could ever imagine. Rosetta Stone® interactive software teaches you any of 30 languages, all without translation, memorization, or grammar drills. It's so effective that NASA, the U.S. State Department, and a variety of Fortune 500® executives have made it their language tool of choice. That's also why we can back it with a six-month money-back guarantee.

**The natural way to learn.** Rosetta Stone's award-winning Dynamic Immersion™ method taps the skills you used to master your native language. By combining real-life images and the voices of native speakers, you become immersed in your new language and retain what you learn.

-  **SPEAK:** Speech-recognition tools compare your pronunciation with a native speaker.
-  **LISTEN:** Native speakers and everyday language develop your listening comprehension skills naturally.
-  **READ:** Build your reading skills by linking written language to real-life objects, actions, and ideas.
-  **WRITE:** Practice writing the new language and receive immediate feedback.

**Act now to receive a 10% discount.**

Personal Edition. Solutions for organizations also available.

**Level 1**  
Regularly ~~\$209.00~~  
**NOW \$188.10**

**Level 2**  
Regularly ~~\$239.00~~  
**NOW \$215.10**

**Level 1&2 Best Value!**  
Regularly ~~\$339.00~~  
**NOW \$305.10**



**The fastest way to learn a language. Guaranteed.™**

**1-800-399-6162**

Use promotional code ozs087 when ordering.

**RosettaStone.com/ozs087**

**RosettaStone®**  
Language Learning  Success



# Get a Read on Audiobooks

Convert your own CDs and much more **BY CHRISTOPHER BREEN**

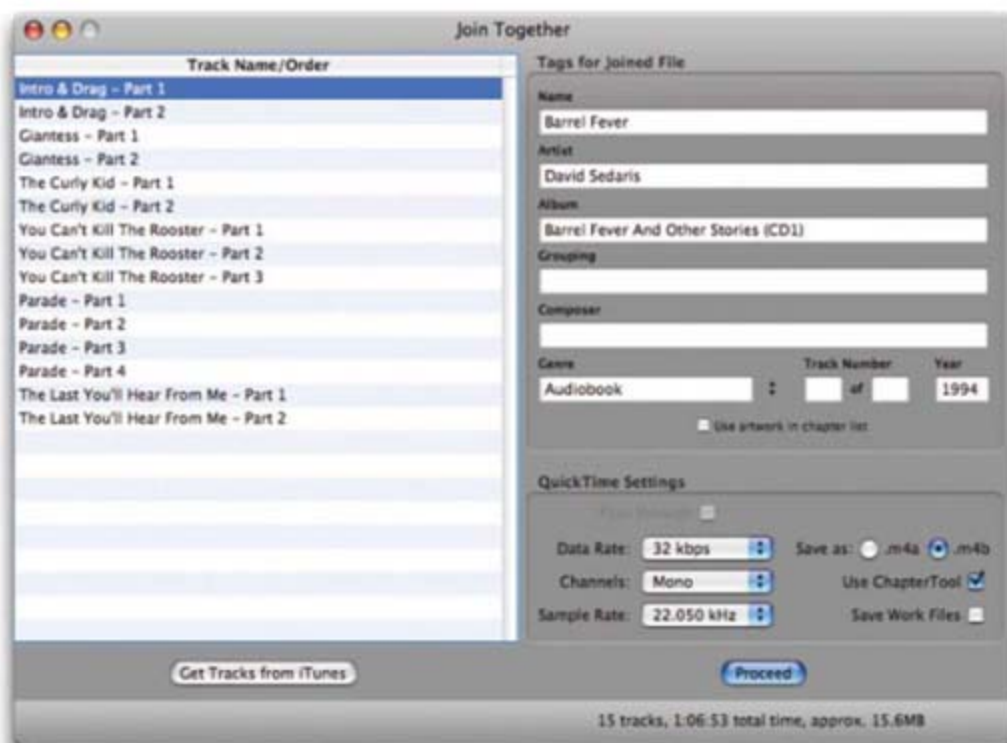
**L**istening to audiobooks is a terrific way to while away a long commute or airline flight, and audiobooks are pleasant companions when you're hanging out in your backyard, in a park, or on a beach. They're also a great resource for people who, due to physical limitations, find reading books challenging.

Purchase an audiobook from the iTunes Store, and you're in business. But if you get an audiobook from another source, you'll frequently find only emptiness beneath the iPod's Audiobooks entry. This is often because of some confusion surrounding audiobooks and their relationship with the iPod. For example, Audible.com sells audiobooks in a variety of formats—which one is right for your iPod? And how do you get audiobooks you rip from your own audio CDs to appear under the iPod's Audiobooks heading? We'll clear up the confusion by showing you the ins and outs of audiobooks and the iPod.

## Play Purchased Audiobooks

The iTunes Store sells audiobooks in only one format—as protected AAC files, encoded in mono at a bit rate of 32 Kbps and a sample rate of 24kHz. This results in much lower fidelity than the iTunes Store's music files have; Apple uses these settings because they create smaller—but still perfectly listenable—files.

Audible sells audiobooks in three formats that are compatible with iTunes, iPods, and Apple TVs—formats 2, 3, and



**Convert Audiobooks for the iPod** Doug Adams's Join Together can easily join audiobook tracks and convert them for iPod use.

4. All three formats are protected by Audible's digital rights management. In order to load these files into iTunes, you must authorize them with your Audible ID. To do so, double-click on a file and enter your Audible user name and password when iTunes prompts you. Audible lets you authorize up to three computers for audiobook playback.

## Create iPod-Compatible Audiobooks

When you move audiobooks purchased from Audible and the iTunes Store to your iPod, they appear under the Audiobooks heading. But if you've ripped an audiobook from a CD or downloaded it from elsewhere, the program has no way of knowing that it's an audiobook—therefore, the program treats it like a regular audio track and files it

under Music in iTunes and on the iPod. But you can change that. The first step involves ripping files from a CD.

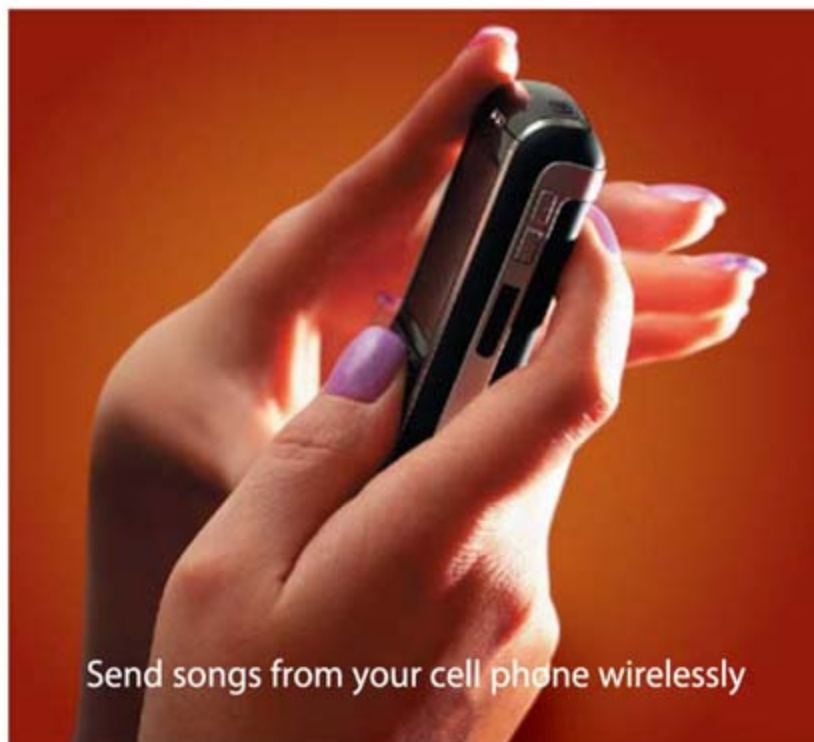
**Rip Your CDs** There are a couple of ways to approach this. One way is to rip all the separate tracks on the CD as a single long track. To do so, launch iTunes, insert your audiobook CD, select all the tracks on it, and, from the Advanced menu, choose Join CD Tracks. This ensures that iTunes treats all the selected content on the CD as one track rather than a series of short tracks, which can be hard to manage. Repeat for any other CDs in the audiobook set.

The disadvantage of ripping separate tracks together is that you lose the ability to move between chapters (each file on the CD represents an audiobook chapter). If you want to navigate to separate chapters with your Click Wheel

## playlist Want more tips on digital music?

For iPod- and iTunes-related expert advice and breaking news, as well as reviews of all the latest gadgets, check out [Playlistmag.com](http://Playlistmag.com).





Send songs from your cell phone wirelessly



Listen to your music wirelessly



Watch your video clips



With One Unit



## "All in One" iLuv i277

Enjoy wireless freedom with BluePin technology

- Send music from cell phone, laptop, etc. to i277 with Bluetooth wireless technology
- Connect i277 to your Bluetooth stereo headset for wireless experience
- Watch your iPod videos on your TV with AV output
- AM/FM radio with dual alarm clock function

\* iLuv products are available at fine retailers like Staples, J & R Music World, Target.com, Bloomingdales, Fortunoff, EXPO, Fry's and Micro Center.



# iLuv™

[www.i-Luv.com](http://www.i-Luv.com) | INNOVATIVE LIFESTYLE & UNQUESTIONABLE VALUE

iLuv and BluePin are trademarks of JWIN Electronics Corp. iPod is a trademark of Apple Computer Inc. The Bluetooth word and Bluetooth logo are trademarks of Bluetooth SIG Inc. iPod is not included. For more information on iLuv products, please call 1-866-807-5946 or 1-516-626-7188.



iPod, you're better off ripping individual files and joining them afterward. To do so, simply insert the CD and click on Yes when a dialog box asks whether you'd like to import the CD into your iTunes library. (If you don't see this option, select the CD in iTunes' Source list and click on the Import CD button at the bottom of the iTunes window.)

**Convert Your Files** Now that you have these files in iTunes, you need to convert them so they'll appear in the iPod's Audiobooks menu. While you can do this by hand—converting the files to AAC and then changing their file extensions from .m4a to .m4b—there are easier options.

The first is a combination of Doug Adams's AppleScript Studio application Join Together 5.1.2 (payment requested; [macworld.com/2778](http://macworld.com/2778)) and Apple's free Chapter Tool ([macworld.com/2779](http://macworld.com/2779)). Start by dragging the ChapterTool folder to your user folder's Music folder. After ripping the files from the CD in iTunes (which is more reliable than using Join Together to do so), select them in iTunes and launch Join Together. You should then see your files in Join Together's window. In the QuickTime Settings area, choose 32 kbps from the Data Rate pop-up menu, Mono from the Channels pop-up menu, and 22.050 kHz from the Sample Rate pop-up menu. If you'd rather not reencode your audio files—because you really can't stand low-quality audio, for example, or your files are already encoded at a lower quality—and you just want them to appear in your iPod's Audiobooks menu, select the Pass Through option.



**Join Tracks** iTunes' Join CD Tracks command lets you rip selected CD tracks as one long file.

This works as long as all the files have the same bit rate.

You'll also need to enable the .m4b Save As option. And if you want to maintain the ability to jump from one section of the book to another—to skip the opening prologue or dash to the end to find out whodunit, for example—enable the Use ChapterTool option. iTunes 7 will display a new Chapters menu when you play such a file, and the iPod will recognize its chapters as well.

Click on Proceed, and Join Together will join the files, convert them to a format compatible with the iPod's Audiobooks settings, add chapter markers, and move the completed file to your iTunes library (where it will appear under Audiobooks in the Source list). Like downloaded audiobooks, your files will be of a lower audio quality than the music files in your iTunes library. That's OK, for two reasons: Audiobook files can take up a load of memory unless you use space-saving encoder settings. And you don't need pristine audio quality for speech, as opposed to music, where you can really hear the difference.

**Easier Conversion** If even taking two steps—ripping your audiobook CDs and then encoding them for iPod compatibility—seems like too much work, Splasm Software's Audiobook Builder (\$10; [www.splasm.com](http://www.splasm.com)) is a worthwhile utility for constructing audiobooks from beginning to end. It can easily convert a series of audiobook files into a long file (complete with chapter markers), convert that file to an iPod audiobook format, and even add artwork to your audiobook and its chapters.

## Navigation and Playback

There's an Audiobooks entry on every iPod that has a display, and all those models support bookmarking—meaning that when you return to an audiobook, it will start where you left off. But only Click Wheel iPods support a couple of special audiobook features. First, on these iPods, you can change playback speed. Second, only these models recognize chapters embedded in audiobook files and allow you to skip ahead or back a chapter with the iPod's controls.

To play an audiobook at a faster or slower speed—for those times when you want to zip through a less interesting section or slow down to glean more information—go to the Audiobooks section in the iPod's Settings menu. There you'll see Slower, Normal, and Faster commands. If you choose Slower, your iPod will play the material more slowly while maintaining its original pitch. Faster also maintains the pitch but plays the material more quickly.

To navigate through chapters while the audiobook is playing, simply press the forward button to skip forward a chapter or the back button to move back a chapter.

The iPod shuffle features neither a display nor a true Click Wheel, so where does it fit in? To begin with, iTunes doesn't automatically copy audiobooks to an iPod shuffle, even if they belong to a playlist you've designated for syncing. Instead, you must manually drag them in iTunes to the shuffle icon in the Source list. Also, while the iPod shuffle supports bookmarks, it doesn't support chapters. Press the forward button, and you'll move to the next file rather than the next chapter. So if you want to navigate through chapters on an iPod shuffle, don't join the original CD tracks—keep them as separate files. Finally, when you're playing an audiobook on a shuffle, be sure to switch the shuffle to the play-in-order mode, rather than the shuffle mode, so the audiobook plays in the proper order. ☒

Senior Editor **Christopher Breen** is the author of *The iPod and iTunes Pocket Guide*, second edition (Peachpit Press, 2007).





# Tell your iPod to **Hit the Road**



## TransDock™

Play iPod music and videos in your car



### Play your iPod in your car

Enjoy your iPod content over your car's FM stereo and video system with the new TransDock



### Charge your iPod on the road

TransDock charges your iPod so you arrive at your destination fully charged and ready to go



### Secure, easy iPod access

Convenient access to your iPod while it's cradled securely in your new TransDock



Charge your cell with the USB Power Outlet



TransDock works great with iPod nano



DIGITAL LIFESTYLE OUTFITTERS



FOR MORE INFORMATION PLEASE VISIT US AT [WWW.DLO.COM](http://WWW.DLO.COM)



# Steady Your Shot

Combat blurry photos with image-stabilization technology **BY DERRICK STORY**

**E**ven if you think you have rock-steady hands, it's easy to end up with blurry photos—particularly in low-light indoor environments where you don't want to use a flash (in a church or a museum, for example). In these situations, the shutter has to stay open longer in order to create a good exposure. And the longer it stays open, the more susceptible your image is to the effects of camera shake or subject movement.

To help battle these problems, many camera manufacturers now offer cameras and lenses that include image-stabilization technology. But there are different approaches to image stabilization, each with unique advantages and disadvantages. I'll help you cut through the jargon and figure out which type works best for your style of shooting.

## Stabilization Styles

Here's a closer look at the stabilization options you'll probably find at the camera counter.

**Optical Stabilization** Used in compact cameras and SLRs, optical stabilization is the most common image-stabilization method. Different manufacturers have different names for it: Nikon calls its optical stabilization Optical Vibration Reduction when referring to cameras, and VR when referring to lenses. Canon calls its optical stabilizer the Image Stabilizer (IS); Panasonic, the Mega O.I.S.; and Sigma, the Optical Stabilizer (OS) system.

Optical stabilization uses gyroscopes within the camera or the camera's lens to detect camera shake, and then steadies the path of the image as it makes its way to the camera's sensor (CCD). Canon, one of the first companies to develop this technology, employs a floating lens element that moves in the



**Image Stabilization at Work** These shots were taken with Panasonic's Lumix DMC-FZ8 compact camera, using a fully extended 12× optical zoom. The first photo shows the softening effects of camera shake. The second, captured with optical image stabilization turned on, is much sharper.

opposite direction of the shake. For instance, if you suddenly move the camera upward while snapping your shot, the floating lens element moves the other way, thus stabilizing the image as it heads toward the sensor. In SLRs, the gyroscopes are often located in the lens; in point-and-shoots, they are positioned in the body (since there is no room in the lens on these tiny shooters).

**Sensor Stabilization** This technology works similarly to optical stabilization: with sensor stabilization, gyroscopes located in the camera body detect shake and then move the image sensor to counteract the motion. Although it's available on some point-and-shoots, sensor stabilization is more commonly used in SLRs. Olympus refers to this technology as Sensor-Shift Image Stabilization; Pentax, Shake Reduction; and Sony, Super SteadyShot.

**Digital Stabilization** Unlike optical and sensor stabilization, which actually correct the image while you're capturing a picture, digital stabilization attempts to make a picture clearer by changing the camera's settings or by attempting to alter the image after it has been captured. There are several different approaches to

digital stabilization. One of the most useful is Intelligent ISO. Used primarily in compact cameras, an Intelligent ISO feature automatically increases the ISO, or light-sensitivity, setting when the image sensor detects a moving object. As a result, the camera is able to use a faster shutter speed to snap a picture, thus freezing the motion of the subject and reducing blur. When the subject stops moving, the camera automatically returns to a lower ISO setting. This last part is important because higher ISO settings also tend to produce more image noise. Panasonic includes an Intelligent ISO control in many of its cameras, while Fuji employs a similar approach called Picture Stabilization.

## Weighing the Options

When it comes to counteracting camera shake, optical stabilization and sensor stabilization are the two best options, since neither degrades the image in any way. (However, neither will help with blurriness caused by a subject's movement). The advantage of optical stabilization is that it lets you preview an image in the viewfinder or on the LCD—so it's the better choice for pho-



# SANYO



every**picture**  
every**video**  
every**where**

The new waterproof SANYO Xacti E1 captures digital video and 6MP photos that are as clear & brilliant as real life... on land and underwater\*!

- Waterproof Digital Camcorder
- 6 Megapixel Still Images
- 5x Optical Zoom Lens
- 2.5-Inch LCD Display
- Up to 1hr. 20min. Digital Video Per 1GB Memory Card

[www.sanyodigital.com](http://www.sanyodigital.com)

©2007 SANYO Digital Products. All rights reserved. In tests conducted by SANYO Electric Co., Ltd., the \*VPC-E1 meets the IPX8 underwater rating at depths of up to 5ft. for up to 30 minutes. Go to [www.sanyodigital.com](http://www.sanyodigital.com) to learn more. Memory Card sold separately.

**E1** Waterproof  
Camcorder  
**Xacti**



tographers who want to see the effects of stabilization before snapping a shot.

If you're buying an SLR, there are a few more things to consider. First off, because optical stabilization takes place within the lens, you'll have to buy a collection of image-stabilization lenses, which often cost more than their non-stabilized counterparts. With sensor stabilization, you don't need to invest in any specialized lenses, since the camera is doing the stabilizing. However, sensor stabilization does become less effective when you use telephoto lenses longer than 300mm. If you do a lot of close-up photography, you'll get better results with optical stabilization.

In general, digital stabilization is a less effective approach than optical or sensor stabilization. Digitally stabilized pictures tend to look less sharp and have more noise. Of the digital-stabilization options, Intelligent ISO is a good choice because it minimizes motion blur caused by moving subjects, such as two-year-old children. This is something optical and sensor stabilization can't do.

If you're shopping for a new camera, spend a little more money to get optical or sensor stabilization. Even better, look for a camera that offers a combination of approaches—optical or sensor stabilization to combat camera shake, and Intelligent ISO for moving subjects.

If you're a sports photographer who likes to do a lot of panning (a technique in which you follow a moving subject with the camera during an exposure), you should look for a camera or lens that offers stabilization on a single axis. Generally speaking, image stabilizers

operate on two axes, meaning that they work whether you're moving the camera vertically or horizontally. But some cameras also provide single-axis image stabilization, which stabilizes only vertical movement as you pan.

### Keeping Steady without Stabilization

If you're not ready to give up your current camera and invest in one with stabilization technology, there are still a few ways to reduce camera shake.

**Use a Tripod** Your trusty tripod may be low-tech, but it's a reliable image stabilizer. For best results, use your camera's self-timer or a remote release to trip the shutter. Even if your camera is mounted on a tripod, you can still jar it when you press the shutter button.

**Firm Your Grip** If you don't have a tripod handy, place the camera on a steady surface or use a firm hold to improve sharpness. Lock your elbows against your body or lean against a solid surface, and then gently squeeze the shutter button just after you finish exhaling (that's when you're at your steadiest).

**Adjust ISO** Try increasing your camera's ISO setting from 100 to 400. This enables faster shutter speeds and should reduce blur. You'll end up with more image noise, though, especially with cameras that have smaller sensors (such as compact point-and-shoots), so be sure to change your ISO setting back when you return to bright light. ❌

**Derrick Story** is the digital media evangelist for O'Reilly Media ([digitalmedia.oreilly.com](http://digitalmedia.oreilly.com)). He also runs a virtual camera club ([www.thedigitalstory.com](http://www.thedigitalstory.com)) featuring weekly podcasts and pro tips.

## 5 Tips for Image Stabilizers

If you're going to invest in a camera with image stabilization, you'll want to get the most from it. Here are some dos and don'ts.

**1 Conserve Batteries** Turn off image stabilizers when your battery is low. Stabilizers use additional juice that you might want to save for those last few precious sightseeing shots.

**2 Watch Tripods** Check the manual to see whether you have to turn off the stabilizer when mounting your camera on a tripod (which you still might use when you want to jump into the picture, for instance). Older cameras require this, but many newer models automatically detect tripod mounting and compensate accordingly.

**3 Remember Close-Ups** Stabilization is usually more important at higher magnifications. If you use long telephoto lenses (200mm or more) or shoot in macro mode, make sure image stabilization is turned on.

**4 Know Your Stabilizer** Check your manual to learn about the different stabilization modes. For example, Panasonic's \$350 Lumix DMC-FZ8 ([www.panasonic.com](http://www.panasonic.com)) has two modes. In Continuous, the camera keeps the stabilizer activated and displays the results on the LCD in real time. Shoot Only mode applies stabilization just when you press the shutter button. This consumes less battery power but doesn't let you preview the results of stabilization.

**5 Play Around** Most companies provide specifications for the stabilizer's range of effectiveness (usually measured in f-stops), but you shouldn't rely solely on them. Some lenses with optical stabilization have a range rated as high as four f-stops, but your personal shooting technique may result in a smaller range. So test your equipment before important shoots, and find out what works for you.



**Night Shooting** Image stabilization allows you to take photos after the sun sets at shutter speeds as low as  $\frac{1}{8}$  of a second.



# > take our survey

---



## where?

Simply log onto:

**[www.macworld.com/surveys/joinpanel/](http://www.macworld.com/surveys/joinpanel/)**

**when?** We need to hear from you by **7/30/07** in order to be included in the drawing.

**why?** Because we'd like to hear from fellow Mac users like you—and you might even win a new computer!

Take our survey to join the Macworld Reader Panel and enter Macworld's 20-inch Intel 2 Core Duo iMac sweepstakes. By joining the panel you'll be periodically invited to participate in online research. And panelists get a chance to win every time they take part in a survey. Participation is open to all eligible Macworld readers 18 years old or over. Make a difference. Beginners, Experts, Switchers – let your voice be heard. We're listening.



# > maybe even win a new Mac!

---

## Macworld

NO PURCHASE NECESSARY TO ENTER OR WIN. Void where prohibited by law. Drawing is open to all eligible Macworld readers who complete the survey and are 18 years old or over. We must hear from you by 7/30/2007 to be included in the drawing. Winner will be notified by email approximately three weeks after survey close, on or about 8/20/2007. For Official Rules, please visit [www.macworld.com/surveys/panel/rules.cfm](http://www.macworld.com/surveys/panel/rules.cfm). All information provided will be kept completely confidential and only used in combination with other respondents. Personal information will not be sold, shared or used in any way outside the scope of this research. For more on privacy, visit [www.macworld.com/surveys/panel/privacy.htm](http://www.macworld.com/surveys/panel/privacy.htm).



# 3 Geek Tools

Power up your desktop, write to NTFS volumes, and selectively reinstall software.

**S**ometimes Mac OS X has everything you need. But sometimes it doesn't. Occasionally you need to do some kind of system work that your operating system just doesn't support. In those cases, you need to turn to specialized tools like one of the three programs here.

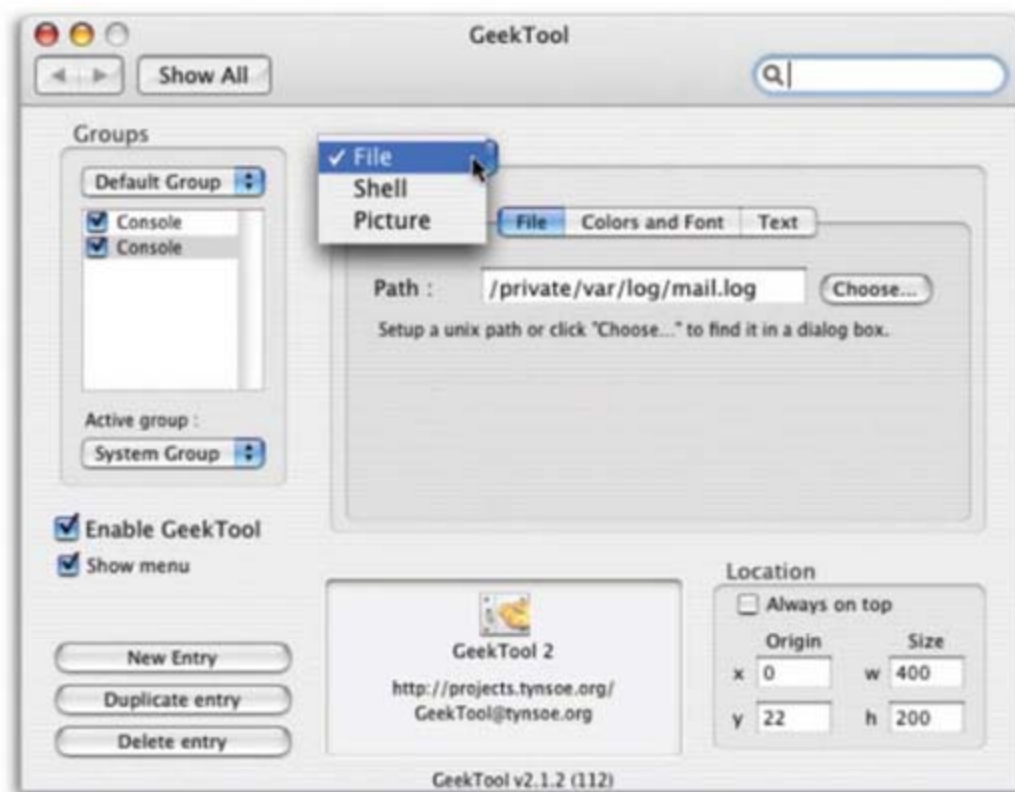
## GeekTool

The open-source GeekTool (free; [projects.tynsoe.org/en/geektool/](http://projects.tynsoe.org/en/geektool/)) turns your OS X desktop into more than just a holding pen for folders and files. It embeds shell-command output, text files, and images on the desktop, giving you instant access to all kinds of information without a lot of eye candy.

After you download and install GeekTool, it appears in System Preferences. You use its preference pane to add and configure items you want to appear on the desktop. To add a new item, you just click on the New Entry button. From a drop-down menu, you then choose File (for text files), Shell (to display the output of Unix commands), or Picture (for images).

For example, to keep an eye on what's going on inside your Mac, you could choose File from the drop-down menu, and then set the path to `/private/var/log/system.log`. As events occur on your Mac, the system log will update live on your desktop.

Anything you can do from the Terminal command line, you can do with a GeekTool Shell entry. To see how long your Mac's been up and running, for example, select Shell, and then type `uptime` in the Command field. You can also use piping, as in `ifconfig en0 | grep netmask` (which displays your Mac's current IP address). To monitor the CPU and memory usage of active processes, combine the shell's `top` and



**GeekTool** Using GeekTool's preference pane, you can specify which files, shell-command output, or images you want to appear directly on your OS X desktop.

tail commands: `top -FR -o cpu -n 20 -1 2 | tail -21`.

Finally, if you want to embed local or Web-based images on your desktop, you simply choose the Picture option, and then supply a URL.

No matter which of those three options you choose, you can specify a location on screen (using x-y coordinates), a size in pixels, and text formatting. When you're specifying a color for text or shell output, remember to take your desktop background into account: if your desktop is dark, choose a lighter color for the output (and vice versa).

To keep GeekTool entries from hogging unnecessary system resources, try to be as conservative as possible with each entry's refresh rate. By default, shell commands refresh every

10 seconds. If you need to run your script only once an hour, set Refresh to **3600** instead. Your daily Web graph should update only once a day (or every 86,400 seconds).

For more information on this and other features, see the documentation at [macworld.com/2845](http://macworld.com/2845). —GINA TRAPANI

## MacFUSE

By default, OS X formats drives with HFS+ (Hierarchical File System Plus), aka Mac OS Extended; OS X can also format drives using the MS-DOS File System (FAT), or the Unix File System. MacFUSE (free; [macfuse.googlecode.com](http://macfuse.googlecode.com)) is an open-source project that makes it easier to add support for new file systems to your Mac.



Why would you want to do that? One of the biggest reasons is that while you can read Windows NTFS volumes in OS X, you can't write to them. Or you may want to do something more obscure, such as treat an FTP server as just another volume in the Finder, or use your Gmail account to store files and e-mail messages. Whatever the reason for using an alternative file system in OS X, MacFUSE will let you do it.

MacFUSE is based on an open-source project called FUSE (short for Filesystem in Userspace), which lets you work with all sorts of file systems, no matter which ones your operating system supports natively. Because FUSE has been available for a while in Unix, programmers have created a bunch of file systems for it; now Mac folks can use them.

Installing MacFUSE is simple: You download a disk image from [macworld.com/2846](http://macworld.com/2846) and run the installer package. You then need to install one of the file systems that MacFUSE supports. If, for example, your goal is to get full access to a Windows NTFS volume, download the NTFS-3G package from [macworld.com/2847](http://macworld.com/2847). That's it. Your Mac should now be ready to mount, read from, and write to NTFS volumes.

(Although NTFS-3G is getting the most buzz, there are many more FUSE-compatible file systems you can try. Check out the full roster at [macworld.com/2848](http://macworld.com/2848). Note that not all of these other systems will work in OS X.)

One warning: While most users report that MacFUSE and NTFS-3G are quite stable, we're talking about a file system here, so use caution: Try out the software before you rely on it for anything critical.

If you need help, the MacFUSE project site ([code.google.com/p/macfuse/](http://code.google.com/p/macfuse/)) has installers, source code, and news updates. (Note that I'm listed there as a team member. In reality, that simply means that I've uploaded some documents to the site.) For information specifically about NTFS-3G, including downloads, background information, and a handy FAQ, see [macworld.com/2850](http://macworld.com/2850).—SCOTT KNASTER

### Pacifist

Occasionally, something may go wrong with your system that requires you to reinstall a missing or corrupted system file. Or you may have a specific program component that just won't launch and you need to get a fresh copy of it. Whether you're replacing specific files from the Mac OS X installer or a single file from an application installer, Charlesoft's \$20 Pacifist (★★★★; [macworld.com/2851](http://macworld.com/2851)) can do the trick.

To use Pacifist, you drag an installation package (a .pkg or .mpkg file) or a disk image into its window. The program then displays a list of all its files and their default installation destinations. Unlike Apple's Installer, Pacifist allows you to

select individual files to install. It can also install system files on a bootable volume that is not the current startup volume.

Pacifist's Find function makes finding specific files or programs easy, even in large packages. For example, if you need to replace a corrupted font that was installed as part of OS X, load your OS X installation disc, go to

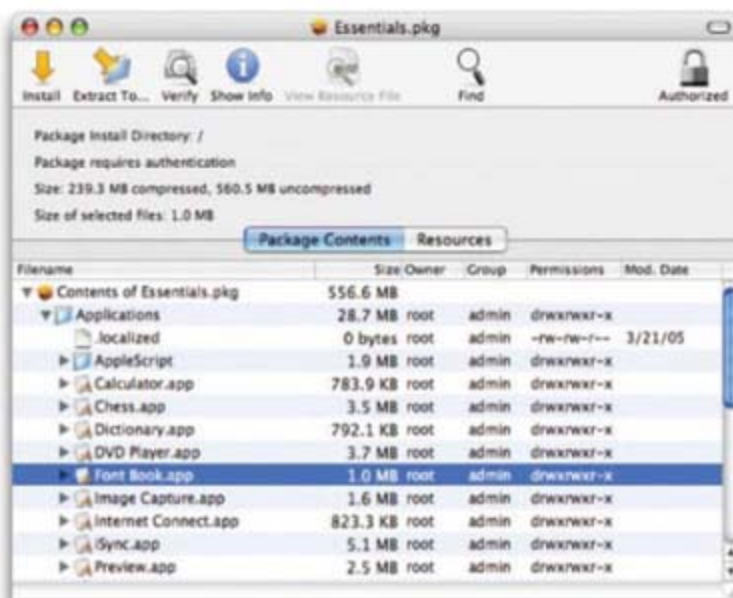
/System/Installation/Packages on that disc, and drag OSInstall.mpkg into the Pacifist window. Click on the Find button and type the font's name, and the results will display in a drawer. Click on one of those results, and the list in the Pacifist window expands to show that item. You can then install or extract the item you need.

If you have doubts about whether you've installed a particular program correctly, open its installation package, or its receipt (a record of the installation, located in /Library/Receipts), and click on Verify in Pacifist's toolbar. Pacifist can check the installation, as well as file permissions and file contents; the latter option verifies the checksums of the files against those listed in the receipt to determine whether they have changed in any way. Pacifist then lists any missing files, changed permissions, or changed files. (Changed files are not necessarily a problem; Software Update or a program's updater may simply have updated them.)

Finally, Pacifist has a useful Display Kernel Extension Report command; when you run this, Pacifist displays a list of all kernel extensions installed on your Mac. This report tells you the kernel extensions' names, bundle IDs, and receipts (indicating which package installed them), and also whether Apple or a third party provided them. You can use this information to quickly spot any kernel extensions that might be causing system problems.

Pacifist is powerful, and as such it can be dangerous. If you use it to install an older version of a program that you've since updated, you might render your system unstable, especially if you install elements of OS X. But savvy users will realize that, in spite of these risks, Pacifist is an irreplaceable software-maintenance and -troubleshooting tool.—KIRK MCELHEARN

**Scott Knaster** is a technical writer at Google. **Kirk McElhearn** writes about more than just Macs on his Web site, Kirkville ([www.mcelhearn.com](http://www.mcelhearn.com)). **Gina Trapani** is the author of *Lifehacker: 88 Tech Tricks to Turbocharge Your Day* (Wiley, 2006) and the founding editor of [Lifehacker.com](http://Lifehacker.com).



**Pacifist** From within Pacifist, you can look inside installer packages and pick which specific components you want to reinstall.



# Help Desk

## Mac OS X Hints

The insiders' tips you won't get from Apple **BY ROB GRIFFITHS**

### Speed Up iPhoto Image Burning

It's easy to select an album or a bunch of photos in Apple's iPhoto and then click on Burn to create a disc of images. But what if you want to combine iPhoto images with other files, such as Word documents and movies? The obvious solution is to use the Finder's Burn Folder feature. In the Finder, select File: New Burn Folder, and drag the images you'd like to burn from iPhoto into the folder. Then drag in the other files you want to include. Insert a blank CD or DVD into your drive and click on Burn; then you're done.

There's only one small problem. When you drag items from most Finder windows into a burn folder, the Finder creates an alias of the original file. But when you drag an image from iPhoto, the Finder actually copies it. Copying (and later deleting) these potentially big files takes extra time. So instead, after you start dragging the images from iPhoto, press and hold the ⌘ and option keys. Keep holding them down until you drop the images into the burn folder, and the Finder will create aliases of the originals. (You can tell that a file is an



**Faster Burn Folders** Typically, the Finder makes copies of any images you drag out of iPhoto and into a burn folder **A**. If you want to speed things up and save hard-drive space, press and hold ⌘-option as you drag the images to the folder. The Finder will quickly create aliases of the originals instead **B**.

alias by its icon, which will have a small arrow in the lower left corner; see "Faster Burn Folders.")

### Borrow a Drive from Another Mac

Say you want to install a program on the old Mac the kids use, but the program is on a DVD while that Mac has only a CD drive. Or say you absolutely must install a program from a CD, but your computer's optical drive has given up the ghost. You might be able to work around these obstacles if you have another Mac in the house.

FireWire Target Disk mode lets you boot one Mac in Target Disk mode (by holding down the T key while starting

up), and then connect it to another with a FireWire cable. The Mac booted in Target Disk mode will appear as a FireWire hard drive to the other Mac. This is a great way to transfer lots of data between two Macs, because FireWire connections are super-fast. (Not all Macs can be put into Target Disk mode; see [macworld.com/2815](http://macworld.com/2815) for a list.) But there's an added bonus with most recent Macs: you can access not only the target Mac's hard drive but also its optical drive.

You need additional software, such as Roxio's \$100 Toast 8 (ⓂⓂⓂⓂ; [macworld.com/2816](http://macworld.com/2816)) to use this drive for burning. I also wasn't able to use the drive to watch a DVD movie. But you can install



### Have a hint to share?

Go to [MacOSXHints.com](http://MacOSXHints.com) to submit it. This column was based on tips from John Burwell, Jimmy Lundgren, Jakob Peterhänsel, Brent Thompson, and anonymous contributors. Each month, the author of our favorite tip receives the Help Desk mug.



that urgently needed software package or grab some files off a backup disc.

### Navigating iTunes' Cover Flow

iTunes' Cover Flow view (View: Cover Flow View), introduced in version 7, gives you a new way to look through your music library—by album cover. Just drag the scroll bar to the left or right to flip through the album art for your music. But there are also two less obvious ways to peruse your collection.

If you've got a large library and are looking for something specific, first make sure that iTunes' browsing pane is active by clicking on any song in the library or in a playlist. Once you've done that, type a few letters, and Cover Flow will jump to a matching CD in your collection (see "Cover Flow Browsing"). The sort order of the library or the playlist determines the match. For example, if I click on my Album col-

umn and then type **no c**, Cover Flow jumps to *No Code*, by Pearl Jam. If I sort by artist, those same characters take me to the first album I have by No Doubt (albums are sorted alphabetically). And if I sort by song name and type the same thing, I jump to the album *Faded Seaside Glamour*, by Delays—because that album contains a song titled "No Ending."

Alternatively, if you like to flip randomly through your albums when you're looking for something to listen to, give your scroll wheel a spin and watch the covers go flying by. If you use a third-party mouse, you might have to use its configuration software to slow down your scroll rate. If you're using a laptop that supports two-



**Cover Flow Browsing** Use your keyboard to quickly jump to a specific album in Cover Flow view. If I type *dark*, for instance, I jump to a classic Springsteen album. Your sort order determines the match iTunes makes.

finger scrolling, just drag your fingers across (or down—it doesn't matter which) your trackpad.

## OS X 101

### Make Your Own Shortcuts

You know you waste time whenever you reach for the mouse to activate commonly used commands. But what if the command's keyboard shortcut is awkward, or there isn't one for something you do a lot? Try the Keyboard & Mouse preference pane.

**Change a Shortcut** It's easy to reassign a shortcut if it's listed in the Keyboard & Mouse preference pane's Keyboard Shortcuts tab. Just double-click on the existing shortcut and then press the combination you'd rather use. For instance, if you think that **⌘-shift-control-3** (which copies a picture of your screen to the Clipboard) requires too much finger gymnastics, simply double-click on the entry and try a simpler replacement.

You can use the Keyboard Shortcuts tab to change not only program-specific but also systemwide shortcuts. This can be helpful if a standard shortcut is hard for you to remember, or when a shortcut in one program has a completely different function in another. For example, consider **⌘-L**. If you're in Apple's Safari (and most other browsers), that shortcut places your cursor in the address bar, so you can start typing the URL of a Web site. But in iChat, **⌘-L** is the shortcut for logging out—and immediately ending all your current conversations.

To prevent that, you can assign a new shortcut to logging out of iChat. First quit iChat, and then switch to the Keyboard Shortcuts tab of the Keyboard & Mouse preference pane. Click on the plus sign (+) at the lower left corner of the window, and a small

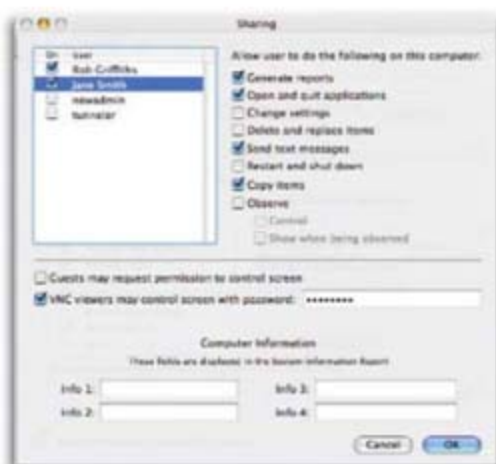


shortcut-definition window will appear. Click on the Application drop-down menu and select iChat from the list. In the Menu Title field, type **Log Out of AIM**. Note that you must exactly match the name of the menu item, including any capitalization. Put your cursor in the Keyboard Shortcut box, and press the new shortcut you'd like iChat to use—perhaps **⌘-shift-L**, which is still easy to remember but hard to type accidentally. Click on Add, and the next time you launch iChat, look under the iChat menu. You should see your new **⌘-shift-L** shortcut.

**Create a New Shortcut** The Keyboard Shortcuts pane is also useful when you want to create shortcuts for commands that don't have them—even a systemwide command such as Sleep. To make a Sleep shortcut, click on the plus sign in the Keyboard Shortcuts tab and set the Applications pop-up menu to All Applications. Type **Sleep** (again, capitalization counts) in the Menu Title field, and then go to the Keyboard Shortcut box and press the shortcut you want to use. I use **⌘-control-O**. Click on Add.

You will need to restart all programs that were running when you created the shortcut, including the Finder, before they can see the shortcut. If you don't have much open, you can just log out and back in (Apple menu: Log Out *user name*). If you have a lot of programs open, it's quicker to open Activity Monitor (/Applications/Utilities/), select the Finder and all programs in the list of processes, and then click on the Quit Process button in the toolbar.





**Remote Control Options** Save yourself some mouse clicks when using Remote Desktop. Press and hold the option key while clicking on a user's On box to enable all privileges for that user.

### Quickly Set Up Remote Desktop

Apple's \$299 Remote Desktop 3 desktop-management package (🔗; [macworld.com/1452](http://macworld.com/1452)) requires a lot of clicking to set up each user on a machine. First you go to the Sharing preference pane, click on Apple Remote Desktop, and click on Access Privileges. Then you have to select the On option next to each user you want to authorize, and decide which of the ten optional capabilities you'd like that user to have. Each capability has its own check box (see "Remote Control Options"). So if you're setting up five machines with six users on each machine, you're looking at 300 mouse clicks to grant everyone all privileges!

So here's the time-saver: hold down the option key before clicking on the On check box next to a user's name.

## WHAT'S ONLINE

**Automatically Restart a Crashed Program** Have a critical background program you want to restart automatically after a crash? Here's how ([macworld.com/2818](http://macworld.com/2818)).

**Create a Textured Desktop** Use Google SketchUp to re-create the textured desktop patterns of yesteryear ([macworld.com/2819](http://macworld.com/2819)).

**Add Audio and Sound Folders to iMovie** Learn how to add custom folders to—and remove them from—iMovie 6's Media tab ([macworld.com/2820](http://macworld.com/2820)).



## POWER TIP OF THE MONTH

### Use ⌘-F to Search iTunes

One of the things I love about OS X is its consistency. Consider File: Open (⌘-O), Edit: Copy (⌘-C), and File: Print (⌘-P). It doesn't matter which application you're using, you know exactly what those menu commands and shortcut keys will do. The same goes for the shortcut ⌘-F—it always activates Find or Search. At least, it does in Apple's Safari, TextEdit, and iPhoto, as well as in probably 200 other programs I could name.

Try it in iTunes, though, as I used to do by force of habit, and you get the full-screen iTunes interface. That's quite a surprise when you're expecting to see the cursor jump to the Search box. You might think that I could simply reassign the shortcut, using the handy Keyboard Shortcuts tab of the Keyboard & Mouse pane in System Preferences (see "Make Your Own Shortcuts"). Unfortunately, if you go to enter the name of the Search menu command, you'll find that there isn't one! But never fear: you can use Terminal (/Applications/Utilities/) to reassign this shortcut.

The first step is to change iTunes' View: Full Screen shortcut from ⌘-F to something else. Quit iTunes and open the Keyboard & Mouse preference pane. Select the Keyboard Shortcuts tab, and click on the plus sign (+) to add a new shortcut. Set the Application pop-up menu to iTunes, type **Full Screen** in the Menu Title field, and then put your cursor in the Keyboard Shortcut box and press a new key combination—⌘-shift-F, perhaps. Click on Add, and you're done—you can now use ⌘-shift-F to access iTunes' Full Screen mode.

Now launch Terminal (make sure iTunes isn't running) and copy and paste this command from [macworld.com/2817](http://macworld.com/2817):

```
defaults write com.apple.iTunes \
NSUserKeyEquivalents -dict-add "Target Search Field" "@F"
```

Press return. That's it; you're done. Open iTunes and press ⌘-F—the cursor will jump to the Search box.

If you ever decide you'd like the old behavior back, you don't need Terminal at all. Just quit iTunes, go back to the Keyboard Shortcuts tab of the Keyboard & Mouse preference pane, and use the minus-sign button (-) to delete the entry for iTunes' Full Screen menu. The next time you launch iTunes, ⌘-F will invoke Full Screen mode again.



When you do, all ten of that user's capabilities will be automatically activated. Repeat the process, and you'll disable all ten capabilities, as well as remove that user's access. This is a much faster way to enable all privileges for users (or even most privileges—just deselect the privileges you don't want to grant).

### Use Preview to Create Image Files

By default, Apple's Preview opens most of the PDFs and images you come upon. But that's not all Preview can do—it can actually create images, at least in one very specific situation: when you have an image on the Clipboard. After you've copied a graphic, open Preview and press ⌘-N. Preview automatically creates a file from the

contents of the Clipboard. Use File: Save to save the image in the format and location of your choosing.

This can be handy, for example, if you use Apple's Keynote and want to create an image from a slide. Press ⌘-C with the slide highlighted in the navigator, switch to Preview, and press ⌘-N. Ta-da!—the slide is now an image. Also, if you ever grab a portion of a screen and send it to the Clipboard (using the shortcut ⌘-shift-control-4), and then decide you'd rather have the image be a file of its own, just switch to Preview and press ⌘-N—there's no need to grab the screenshot again. 📧

Senior Editor **Rob Griffiths** runs the [MacOSX-Hints.com](http://MacOSX-Hints.com) Web site.



# MacMania™ 7

November 3rd – 13th, 2007 • Panama Canal

[www.GeekCruises.com/Mac-7](http://www.GeekCruises.com/Mac-7)

## Mac Seminars

- Introduction to Lightroom
- Introduction to Aperture
- iPhone: The Missing Manual
- Maximizing iPhoto
- Photoshop for Photographers
- Integrating Photoshop with Aperture, Lightroom, or iPhoto
- Which Is Best for You — Aperture, Lightroom, or iPhoto?
- iDVD and iMovie
- Apple's Latest and Greatest
- The Ground Floor Guide to the Macintosh
- Extreme Googling
- Inside Mac OS X "Leopard"
- Leopard Power User Tips
- Introduction to iLife
- Pushing iLife to the Limit
- Amazingly Cool Utilities
- Personal Podcasting Primer



## Speakers

Janet Hill • David Pogue  
Randal Schwartz • Jason Snell  
Derrick Story • Robin Williams  
Steve Wozniak



## The Conference

Cruise prices vary from \$1,399 for an Inside Stateroom to \$4,999 for a Full Suite, per person. (Cruise pricing is subject to change. Geek Cruises will generally match the cruise pricing offered at the Holland America website at the time of booking.) Taxes are \$199 per person. For those attending the conference, there is a \$795 fee and includes all courses listed, any course materials, and two private Geek Cruises parties.

CST# 2065380-40

CO-PRODUCED BY:

**Insight Cruises**  
EDUCATION THAT TAKES YOU PLACES

**Macworld**



# Mac 911

Solutions to your most vexing Mac problems **BY CHRISTOPHER BREEN**

## The Not-in-a-Playlist Playlist

**Q:** I often receive MP3s that are copied to iTunes' library when I open them. As time goes by, the library gets filled with stuff I don't want. The stuff I do want is already sorted into playlists. Can I make a smart playlist with songs that are not in any playlist?

**Bruno Grieco**

**A:** Sure. But before I offer a couple of smart-playlist techniques, allow me to refer you to the always helpful Doug's AppleScripts for iTunes site, where you'll find the free Not In Any Playlist To Playlist 1.0 script ([macworld.com/2808](http://macworld.com/2808)). This AppleScript will do just what its name promises—locate tracks that aren't in a playlist and place those tracks in their own playlist. Once they're there, you can select them all, hold down the option key, and press delete. A warning message will ask you whether you'd really like to delete the tracks from your iTunes library. You do, so click on OK. Note that if you have a lot of tracks, the script can take a long time to do its job.

If you'd rather create your own version of this unwanted-songs playlist, there are a couple of ways to do so. The first is to create a smart playlist (File: New Smart Playlist) that includes multiple conditions along the lines of: Playlist Is Not *playlist\_name\_1*, Playlist Is Not *playlist\_name\_2*, Playlist Is Not *playlist\_name\_3*, and so on, with a con-



**Not in a Playlist** There's an easy way to track down things you haven't bothered to put in a playlist. Put your playlists in a folder, and then create a smart playlist that finds everything that's not in the folder.

dition for each playlist you've created in iTunes' Source list. If you have lots of playlists, this will quickly get tiresome.

The second way is to choose File: New Folder (which creates a new folder in iTunes' Source list), name the folder All My Playlists (for example), and drag all your playlists into this folder. Then you can create a new smart playlist that reads: Playlist Is Not All My Playlists (see "Not in a Playlist"). The resulting smart playlist should contain all the tracks that aren't in the playlists within your All My Playlists folder.

## When Fresh Applications Aren't

**Q:** When opening applications, I often see an alert message that reads, "You are opening the application

whatever for the first time. Are you sure you want to open this application?" This happens repeatedly for the same application, day after day. What can I do to eliminate these alerts for programs that I have already opened?

**Judd Mosser**

**A:** Your Mac is behaving as if its LaunchServices database—the database that keeps track of which applications have been launched and which haven't—has been mucked with. Given that the guts of LaunchServices are tucked away in places a user wouldn't normally go, a maintenance utility such as Maintain's \$15 Cocktail ([macworld.com/1214](http://macworld.com/1214)) or Titanium Software's free OnyX (0000; [macworld.com/1214](http://macworld.com/1214)) is probably responsible.



### Have a problem?

Go to the Mac 911 forum ([macworld.com/2467](http://macworld.com/2467)) for help with your misbehaving Mac or applications.



As wonderful as these tools can be, they can also cause this kind of unexpected behavior. If you've run such a utility, launch it and check its autopilot settings. My guess is that something is working in the background to keep your LaunchServices database fresh yet frustrating.

### The Computer Ate My Icons

**Q:** My wife left our kids unattended for a few minutes at the computer. Now most of my System Preferences icons are absent. In their place are file-looking icons containing tiny System Preferences icons. All the preferences still work, but I'd like my regular icons back.

James Gibson

**A:** I wouldn't rush to blame the kids—sometimes these things just happen. Go to your *user folder/Library/Caches* and get rid of *com.apple.preferencepanes.cache*. In all likelihood, your cache file got corrupted. Deleting it will create a new one that should make your regular icons reappear.

### Accidental Universal Access

**Q:** Lately my iMac has been in a strange state: Every mouse operation evokes a spoken response, as does every attempt to open a control panel or a window. Additionally, there is always a dark rectangle outlining some object in the current window or on the desktop. I looked through various libraries for an obvious .plist file, but could find none. Restarting my Mac has not helped. Ideas?

Clay Ross

**A:** Allow me to offer this general advice: When your Mac unexpectedly talks back to you, zooms in on objects, activates windows and menus when you press keys on your keyboard, displays an enormous cursor, or shows you a display that looks like an X-ray image, run, don't walk, to the Universal Access preference pane.

This System Preferences pane was designed to help people with physical limitations. You can use it to control the cursor with the keyboard or make your Mac recite the names of buttons and menu items, for example. Many of

## Bugs & Fixes

BY TED LANDAU



### Less Than Optimal Optimizing

When you arrive at the final phase of most Mac OS X update installations—anything from the newest version of iTunes to a security patch—the “Optimizing System Performance” message appears. Beware of a serious bug that can bite at just this moment, possibly causing corrupted system files that make restarting your Mac impossible. Fortunately, this problem is easy to avoid: Just don't touch your Mac while the update is optimizing—launching an application is especially dangerous, as doing so might trigger an additional optimization process. Multiple optimization processes running at the same time are the cause of the problem. If this advice has arrived too late for you, an article on Unsanity's Weblog ([macworld.com/2809](http://macworld.com/2809)) explains how to undo the damage.



### Don't (Kernel) Panic

Recently, I decided to take a prerelease version of Patrick Stein's ScreenRecycler (free; [www.screenrecycler.com](http://www.screenrecycler.com)) for a spin. This promising utility allows you to use the display on a “spare” Mac (such as a laptop temporarily sitting idle) as a second monitor for another Mac. I installed the program and restarted my Mac—and saw a kernel-panic message. This is the sweat-inducing message that states, “You need to restart your computer,” in multiple languages. Every time I restarted, the message appeared.

Fortunately, there's a simple way around kernel panics—especially ones that occur at startup after you've installed new software. Restart your Mac and hold down the shift key immediately after the tone sounds. (You can let go when the gray Apple logo appears—see this Apple article for more details: [macworld.com/2810](http://macworld.com/2810).) The Mac will boot into Safe Boot mode. Next, navigate to the */System/Library/Extensions* folder and locate a file associated with the application you just installed. Its name will end with the file extension .kext—in my case, it was called *ScreenRecyclerDriver.kext*. (If you're unsure which .kext file is the relevant one, use CharlesSoft's \$20 Pacifist [[www.charlessoft.com](http://www.charlessoft.com)] to open the software's Installer package and see which .kext file

was installed.) Drag the file to the Trash and restart your Mac again normally, and all should be fine. Of course, this means that you can't use the program. But if it's a prerelease (beta) version, as my version of ScreenRecycler was, the bug will presumably be squashed before the official release.



### Vista Black Screen

If you're using Boot Camp to run Microsoft Windows Vista, and you have a Bluetooth device (such as a mouse or keyboard), you may see a black screen when you wake the Mac up from sleep—and find yourself unable to use your Bluetooth device. To prevent this, you need to install a Vista “hotfix.” The details are available on Microsoft's Web site ([macworld.com/2811](http://macworld.com/2811)).



### EyeTV Password Problems

Are you having trouble logging on to your Mac or accessing Keychain? Do authentication dialog boxes disappear (in other words, crash) almost immediately after they appear? If you've recently installed Elgato's \$80 EyeTV 2.4 (version 2.1, [macworld.com/1239](http://macworld.com/1239)), it may be the problem. The unusual cause of this bug is an interaction between an MPEG QuickTime component installed by EyeTV in the */Library/QuickTime* folder, and 3ivX and DivX components that, if present, are located in the same folder. One quick way to fix the problem is to remove the 3ivX and DivX components and restart your Mac. Alternatively, download the “revised” EyeTV 2.4 (build number 2654 or later—you can check this by selecting the EyeTV: About EyeTV menu item) from [macworld.com/2812](http://macworld.com/2812). If you make sure you've got that version, you'll avoid the problem altogether.

Senior Contributor **Ted Landau** is the founder of MacFixIt ([www.macfixit.com](http://www.macfixit.com)), a Web site devoted to reporting Mac problems and solutions. Got a problem to report? E-mail [bugs@macworld.com](mailto:bugs@macworld.com) or post it in our Mac 911 forum at [Macworld.com](http://Macworld.com).



these functions can be initiated with the press of a few keys. Apple has done its best to make accidentally activating these key combinations difficult, but that can still happen.

And it happened to you. Somehow, you managed to press  $\text{⌘-F5}$ . This command fires up Voice Over, a helpful tool that can recite the name of the foremost application and the names of items within it, while highlighting those items (that's the dark rectangle you're seeing). Press  $\text{⌘-F5}$  once more, and your Mac will cease its jabbering.

## Export AIFF Podcasts in GarageBand

**Q:** I create my podcasts in Apple's GarageBand. I generally like the program, but one thing bugs me. GarageBand will export my podcasts only as compressed audio files. I'd like to export them as uncompressed AIFF files, so I can process them with other utilities that don't work with MPEG-4 files. There doesn't seem to be a way to do this.

From the Macworld.com forums

**A:** It is annoying that GarageBand doesn't offer an obvious way to export podcast projects as AIFF files. But the operative word here is *obvious*. It can be done.

The key is the Podcast track that appears at the top of GarageBand's window—the one that contains such stuff as graphics and chapter markers. Make that track go away, and you can export a podcast as an AIFF file.

Once upon a time, I would have recommended that you assemble your audio, delete the Podcast track, export your audio, have your way with the resulting AIFF file, and import that file back into GarageBand. Adam Christianson, the host of the popular MacCast podcast ([www.maccast.com](http://www.maccast.com)), offers an even better solution.

All you need to do is *hide* the Podcast track. To do so, select the track and choose Track: Hide Podcast Track. The Podcast track will disappear. When it does, the Share: Send Podcast To iTunes command changes to Send Song To iTunes, which lets you know that the file will be sent in the AIFF format. (When you want your Podcast



## TOOLS OF THE TRADE

### Storage in a Pinch

You've got a file on your Mac and you need to transport it to another destination. It's the sort of situation where you want to walk the file over to that destination (when the file is especially large, for example), but you have no easy way to get it there. Sure, you could purchase an external drive, but why bother when you might have something inexpensive at hand that will work in a pinch?

**Your iPod** Just about everyone has an iPod these days, but far too many of us fail to recall that in addition to being the coolest media player on earth, display-bearing iPods are also handy storage devices. Just jack your iPod into your Mac. After iTunes launches, select your iPod in the Devices list, click on the Summary tab if it's not already open, and select the Enable Disk Use option. Now you can copy the file to its hard drive and then copy the file from the iPod to another computer's hard drive.

**Your Laptop** The main convenience of a laptop is its portability. Another convenience is that it can act as a high-capacity storage device. To move a large file from your laptop to another Mac, string a FireWire cable between the laptop and the target Mac, restart the laptop while holding down the T key to put it into Target Disk Mode, and sing Apple's praises when the laptop's hard drive appears on the connected Mac's desktop, ready to have files copied from it to the drive of the connected computer.

**A Raw Hard Drive** If you're a longtime Mac user, you probably have at least one spare computer. Scavenge that Mac's hard drive from its innards and then purchase Newer Technology's \$25 USB 2.0 Universal Drive Adapter ([www.newer.com](http://www.newer.com); [macworld.com/2626](http://macworld.com/2626)). This is an adapter kit that allows you to plug an unboxed ATA, IDE, SATA, or ATAPI drive into your Mac's USB port. The resulting drive is anything but pretty, but it's highly functional (see "Universal Drive Adapter").

**Digital Camera Storage Card** That storage card inside your digital camera is useful for more than holding pictures. Mount it on your Mac with a card reader, and copy files at will.



**Universal Drive Adapter** With Newer Technology's USB 2.0 Universal Drive Adapter in your toolbox, you can easily reclaim a hard drive from an old Mac and use it with your new Mac.

track back again, just choose Track: Show Podcast Track.)

Then you can locate the original file in iTunes (control-click on the file and choose Show In Finder from the contextual menu) and do what you like with it. After you've processed it to your liking, create a new podcast project in GarageBand and drag the file into a track. Then add your podcasty bits and export it.

Why not just create a song project in the first place if you're going to export your podcast as an AIFF file? Choosing a podcast project from the get-go provides you with that nice little podcast template—one that includes vocal

tracks with the right effects already applied, as well as the Jingles and Radio Sounds tracks that many podcasters find useful.

This technique is also worthwhile when your podcast contains so many tracks that GarageBand bogs down. You can reduce multiple tracks into a single lossless track that maintains all the fidelity of the original but that, when you import it into a new GarageBand project, won't be so taxing to your Mac. ☒

Senior Editor **Christopher Breen** is the author of *The iPod and iTunes Pocket Guide*, second edition (Peachpit Press, 2007).



# Macworld

## *Enter to Win*



**Visit [www.macworld.com/giveaway](http://www.macworld.com/giveaway)  
to enter now!**

AS A MACWORLD READER, you have the opportunity to enter for a chance to win one of the following prizes:

*Best Buy Gift Card A \$500 value! • Treo 650 smartphone A \$449 value!*  
*Dell UltraSharp 20-inch Widescreen Flat Panel Monitor (2007WFP) A \$400 value!*  
*ATI X800 XT Graphics Card A \$400 value! • Video iPod (80GB) A \$350 value!*  
*HP Officejet 7410 All-in-One Printer A \$500 value!*  
*Canon Powershot A540 Digital Camera A \$280 value!*

No purchase is necessary. Go to [www.macworld.com/giveaway](http://www.macworld.com/giveaway) to submit your entry.

**NO PURCHASE NECESSARY TO ENTER OR WIN.** The Hi-Tech Giveaway begins at 12:01 PM Pacific Time ("PT") on November 16, 2006 and ends at 11:59 AM (PT) on November 15, 2007. Sweepstakes is open to legal residents of the 50 United States and the District of Columbia, age 18 and older at time of entry. Void where prohibited by law. Sponsored by Macworld, 501 Second Street, San Francisco, CA 94107.



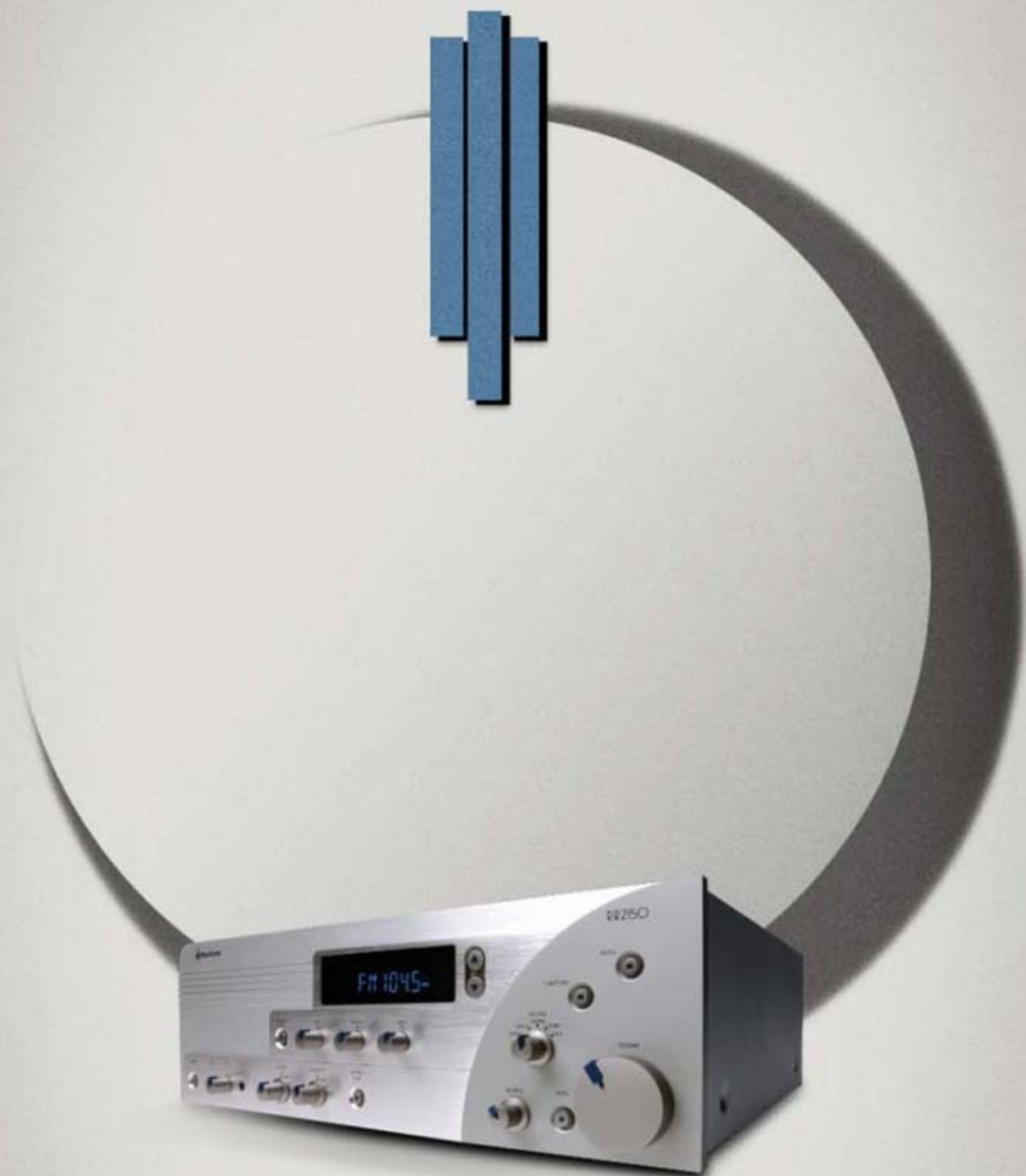
# ADVERTISERS INDEX

Interact with the companies whose products and services are advertised in **Macworld**.

ADVERTISER	INTERACT	PAGE NO.	ADVERTISER	INTERACT	PAGE NO.
<a href="#">4 Over Inc.</a>	<a href="#">4over.com</a>	107	<a href="#">Mac Of All Trades</a>	<a href="#">macofalltrades.com</a>	110
<a href="#">Academic Superstore</a>	<a href="#">mw.academicssuperstore.com</a>	110	<a href="#">Mac Solutions</a>	<a href="#">macsolutions.com</a>	109-110
<a href="#">Acme Made</a>	<a href="#">acmemade.com</a>	101	<a href="#">Macally</a>	<a href="#">macally.com</a>	103
<a href="#">AMCC</a>	<a href="#">3ware.com</a>	51	<a href="#">MacConnection</a>	<a href="#">macconnection.com/mw</a>	96-97
<a href="#">AmericasPrinter.com</a>	<a href="#">americasprinter.com</a>	105	<a href="#">MacHighway</a>	<a href="#">machighway.com</a>	105
<a href="#">Anthro</a>	<a href="#">anthro.com/mac</a>	13	<a href="#">MacMall</a>	<a href="#">macmall.com</a>	4, 94-95
<a href="#">Apple Computer</a>	<a href="#">apple.com</a>	C2-1	<a href="#">MacTank</a>	<a href="#">mailtank.com</a>	104
<a href="#">Audioengine</a>	<a href="#">audioengineusa.com</a>	101	<a href="#">Marware</a>	<a href="#">marware.com</a>	12, 101
<a href="#">Biomorph</a>	<a href="#">biomorph.com</a>	100	<a href="#">Maxtor</a>	<a href="#">maxtorsolutions.com</a>	29
<a href="#">Buffalo Technology</a>	<a href="#">buffalotech.com</a>	25	<a href="#">Micromat</a>	<a href="#">micromat.com</a>	23
<a href="#">Case-Mate</a>	<a href="#">case-mate.com</a>	2-3	<a href="#">MicroReplay</a>	<a href="#">microreplay.com</a>	109
<a href="#">CDW</a>	<a href="#">cdw.com</a>	41	<a href="#">New Egg</a>	<a href="#">newegg.com</a>	14-15
<a href="#">Circus Ponies</a>	<a href="#">circusponies.com</a>	28	<a href="#">Omni Group</a>	<a href="#">omnigroup.com</a>	59
<a href="#">Creative Juices</a>	<a href="#">bigposters.com</a>	105	<a href="#">Other World Computing</a>	<a href="#">macsales.com</a>	C3, C4, 11, 98-99
<a href="#">Dekorrra Optics</a>	<a href="#">eazydraw.com</a>	103	<a href="#">Outlaw Audio</a>	<a href="#">outlawaudio.com</a>	93
<a href="#">Disc Makers</a>	<a href="#">discmakers.com/mw</a>	102	<a href="#">Pantone</a>	<a href="#">pantone.com/colorcontrol</a>	7
<a href="#">DLO</a>	<a href="#">dlo.com</a>	77	<a href="#">PowerMax</a>	<a href="#">powermax.com</a>	111
<a href="#">Drive Savers</a>	<a href="#">drivesavers.com</a>	106	<a href="#">Quickertek</a>	<a href="#">quickertek.com</a>	104
<a href="#">Ecam Network</a>	<a href="#">ecamm.com/video</a>	102	<a href="#">Raidon Technology</a>	<a href="#">stardom.com/tw/dvs/sr6600</a>	24
<a href="#">EDG Graphics</a>	<a href="#">edgmiami.com</a>	105	<a href="#">Rain Design</a>	<a href="#">raindesigninc.com</a>	100
<a href="#">ESS Data Recovery Labs</a>	<a href="#">savemyfiles.com</a>	106	<a href="#">Ramjet</a>	<a href="#">ramjet.com</a>	105
<a href="#">FastMac</a>	<a href="#">fastmac.com</a>	100	<a href="#">Roland</a>	<a href="#">rolandus.com</a>	26
<a href="#">FatCow</a>	<a href="#">fatcow.com/mac</a>	104	<a href="#">Rosetta Stone</a>	<a href="#">rosettastone.com/ozs087</a>	73
<a href="#">Flying Chao</a>	<a href="#">flyingchao.com</a>	104	<a href="#">Sanyo</a>	<a href="#">sanyodigital.com</a>	79
<a href="#">Fujitsu</a>	<a href="#">us.fujitsu.com/scanners/96AA</a>	8	<a href="#">SeafoodByNet</a>	<a href="#">seafoodbynet.com</a>	110
<a href="#">G-Technology</a>	<a href="#">g-technology.com</a>	30	<a href="#">Seiko Instruments</a>	<a href="#">siibusinessproducts.com</a>	10
<a href="#">Geek Cruise</a>	<a href="#">geekcruises.com</a>	54, 87	<a href="#">Sharpdots</a>	<a href="#">sharpdots.com</a>	108
<a href="#">Gefen</a>	<a href="#">gefen.com</a>	102	<a href="#">Shreve Systems</a>	<a href="#">shrevesystems.com</a>	110
<a href="#">Granite Digital</a>	<a href="#">granitedigital.com</a>	102	<a href="#">Softquik</a>	<a href="#">softquik.com</a>	104
<a href="#">Griffin Technology</a>	<a href="#">griffintechology.com</a>	31	<a href="#">TechRestore</a>	<a href="#">techrestore.com</a>	106
<a href="#">Hewlett-Packard</a>	<a href="#">hp.com/go/extreme8</a>	21	<a href="#">Techshell</a>	<a href="#">techshell.com</a>	100
<a href="#">Hildreth Enterprises</a>	<a href="#">pcprices.net/mac</a>	109	<a href="#">V-Moda</a>	<a href="#">v-moda.com</a>	37
<a href="#">i-Luv</a>	<a href="#">i-luv.com</a>	75	<a href="#">Wholesale Printing Direct</a>	<a href="#">wholesaleprintingdirect.com</a>	108
<a href="#">ihome</a>	<a href="#">ihomeaudio.com</a>	33	<a href="#">Wi-Gear</a>	<a href="#">imuffs.com</a>	22
<a href="#">IMSI</a>	<a href="#">turbocad.com/mw06</a>	103	<a href="#">zCover</a>	<a href="#">zcover.com</a>	27
<a href="#">Journey Education</a>	<a href="#">journeyed.com</a>	109	<a href="#">Zoo Printing</a>	<a href="#">zooprintingtrade.com</a>	108
<a href="#">Kace</a>	<a href="#">kace.com/macworld</a>	100			



# A CLASSIC, CIRCA 2007



## The Outlaw Audio RR2150 Stereo Receiver

Outlaw Audio's RR2150 is a classic in more ways than one. This remarkable stereo receiver combines true, state-of-the-art audiophile performance with a unique Art Deco inspired design. Whether your primary music source is a turntable, a tuner or the latest media player, the RR2150 delivers the performance with precision and power. Best of all, at \$649, the RR2150 is classically affordable. Please visit [outlawaudio.com](http://outlawaudio.com) to learn more and to see our other great products, including speakers and the award winning Outlaw Subwoofers.

[www.outlawaudio.com](http://www.outlawaudio.com)



**Outlaw®** 1.866.OUTLAWS

The best values in Home Theater are just a mouse click away™



# Apple's fastest p Now with NEW g

The NEW Apple® MacBook™ Pro sports beefier processing and innovative graphics that will take your mobile lifestyle to the extreme! Its incredible Intel Core 2 Duo processor now runs at speeds up to 2.4GHz so it's like working with a desktop system right in the field! And now every model comes stocked with NVIDIA GeForce 8600M GT pro video graphics!

NEW 15" model with LED-backlit display and NEW 17" model with optional 1920 x 1200 display!

## MacMall Exclusive Deals!

Get up to \$200 cash back!  
Parallels Desktop only \$99!  
HP C3180 Printer FREE!  
Carrying Case only \$99!  
See below for details.

## New 15" & 17" MacBook Pro!



### Apple iMac®

- Up to 24" widescreen display
- Intel Core 2 Duo processing up to 2.33GHz
- AirPort Extreme 802.11g wireless
- Built-in iSight™ and Gigabit Ethernet

starting at ~~\$994~~ - \$75 = **\$919!** #7098936



### NEW 8-Core and 4-Core Mac® Pro

- Two Dual-Core Intel Xeon processors or two Quad-Core Intel Xeon processors
- Incredible storage expansion up to 3TB
- 16X SuperDrive (DVD+R DL/DVD±RW/CD-RW)

starting at ~~\$2194~~ - \$100 = **\$2094!** #7098933

## MacMall is the #1 Apple Direct Reseller!

### Faster wireless! Advanced storage! Cool peripherals!

Apple AirPort® Extreme Base Station  
802.11a/b/g/n  
#7185425

**New!**



only **\$169<sup>98</sup>!**

Office 2004 for Mac Student and Teacher Edition  
#399933



**\$129<sup>99</sup> \$104<sup>99</sup>!**  
After mfr. mail-in rebate. Price before rebate is \$129.99. Ends 9/3/07.

160GB FireWire® Hard Drive  
Designed by F.A. Porsche  
#267261



only **\$69<sup>99</sup>!**



500GB d2 Quadra HD  
eSATA, FW800/400 and USB 2.0  
#7185563



**\$199<sup>99</sup>!**

Cordless Desktop® S 530 Laser for Mac  
#759804



only **\$65<sup>99</sup>!**

### Top tools for media pros!

QuarkXPress 7  
#7175856



upgrade only **\$249!**

Apple Final Cut® Studio 2  
#7236215



upgrade only **\$473<sup>99</sup>!**  
#7236099 Final Cut Studio Full Package \$1294

QuickBooks Pro 2007 for Mac  
#7119553



only **\$178<sup>99</sup>!**

Apple 23" Cinema HD Display  
#459837



was **\$994**  
now **\$894!**

**"WE'LL BEAT ANY PRICE ON ANY APPLE BRAND PRODUCTS"** or competitive promotion on any Apple computer. We may require proof of dealer's pricing. Competitor must be an Apple Authorized Reseller. Product must be in stock at the competition. Advertised item must be identical to the one offered by MacMall and must be a new item in a factory sealed box. We reserve the right to limit quantity ordered. This offer does not apply to special, bonus or free offers, grand openings, special purchases or special buys, manufacturer's rebates, discounts, clearances or to dealers' one-of-a-kind or other limited quantity offers. Offer does not apply to advertising errors made by any authorized dealer. Not open to dealers. Void where prohibited. Sorry offer not valid in conjunction with other rebate offers. On multiple-item queries: "We'll Beat Any Price" applies to the price of the entire order, not individual line items. Offer applies to pre-tax prices only. Offer valid only at time of purchase, not after the fact. ■ UP TO \$200 CASH BACK OFFER-Get up to \$200 Cash Back via MacMall mail-in rebate with purchase of select computer models. Ends 7/8/07. ■ PARALLELS DESKTOP OFFER-Get Parallels Desktop for Mac (P080046) for only \$8.99 after \$10 mfr. and \$60 MacMall mail-in rebates with purchase of any new Intel-based Apple CPU. Price before rebates is \$79.99. Ends 7/8/07. ■ FREE HP PRINTER OFFER-Get an HP PhotoSmart C3180 All-in-One FREE after \$20 MacMall instant rebate and after \$29.99 MacMall mail-in and \$50 mfr. mail-in rebates with purchase of any Apple computer. Price before rebates is \$99.99. Ends 7/8/07. ■ CARRYING CASE OFFER-Get a Briefcase with MacBook or MacBook Pro purchase for only \$9.99 after \$20 mfr. mail-in rebate. Price before rebate is \$29.99. Ends 7/8/07. ■ FREE BELVIN KICKSTAND LEATHER CARRYING CASE OFFER-Free with purchase of select iPod Video (new 30GB/80GB models) after \$14.99 MacMall mail-in rebate offer. Price before rebate is \$14.99. Ends 7/8/07. ■ FREE ACRYLIC CASE OFFER-Free with purchase of any anodized aluminum iPod nano after \$14.99 MacMall mail-in rebate offer. Price before rebate is \$14.99. Ends 7/8/07. ■ FREE ENGRAVING OFFER-Get select iPod and iPod nano models engraved for FREE when you purchase them through MacMall. No rebate required. Not available for U2 Special Edition iPod or iPod shuffle. There is a \$69.99 charge for select iPods. Call or visit [www.macmall.com/rebate](http://www.macmall.com/rebate) to place your order. ■ FREE FM TRANSMITTER OFFER-After \$19.99 MacMall mail-in rebate. Price before rebate is \$19.99. Ends 7/8/07. ■ ALL OFFERS VALID ONLY WHILE SUPPLIES LAST. ■ 1For rebate terms and conditions, please visit our Web site and enter the applicable part number. Download rebate coupons at [www.macmall.com/rebate](http://www.macmall.com/rebate).



# portables ever! graphics power!

But that's not all! The 15" MacBook Pro now has a new mercury-free, power-efficient LED-backlit display. It's lighter and achieves full brightness right upon booting. And the 17" model is available with an optional 1920 x 1200 display that offers 30% more pixels and lets you view 1080 HD video without resizing windows! Call MacMall and power up your own MacBook Pro!

- NEW! Intel Core 2 Duo speeds up to 2.4GHz
- NEW! NVIDIA video graphics and screen options
- Built-in iSight™, wireless and Gigabit Ethernet

MacBook Pro starting at **\$1844!**  
#7254324 Finance for \$60/mo



**NEW Master Collection CS3!**  
only \$2499! #7228222

**NEW Adobe Creative Suite 3!**  
Upgrades from \$393<sup>99</sup>!

**NEW Illustrator CS3!**  
Upgrades from \$195<sup>99</sup>!

**NEW Photoshop CS3 and Photoshop CS3 Extended!**  
Upgrades from \$195<sup>99</sup>!

MacMall is your  
source for LCD  
and plasma  
widescreen TVs!

**Panasonic.**

**SAMSUNG**

**ViewSonic®**

**OLEVIA**

**SHARP.**

**New Faster MacBook!**



## NEW faster MacBook—speeds up to 2.16GHz!

The MacBook™ now offers incredible Intel Core 2 Duo processing at speeds up to 2.16GHz in a durable black or white design that includes high-speed wireless access, a built-in iSight™ video camera, Gigabit Ethernet networking and so much more!

Get online and get to work. Or get connected to friends and family and share your thoughts. Then wind down

enjoy your favorite DVDs on its 13.3" glossy widescreen display. Call MacMall now for your NEW MacBook and get up to speed!

- NEW! Intel Core 2 Duo at speeds up to 2.16GHz
- 13.3" glossy widescreen display (1280 x 800)
- Built-in 802.11n wireless, iSight and Bluetooth

MacBook starting at **\$1019!**  
#7248171 Finance for \$33/mo

Bundles available with  
Windows XP and Windows Vista  
pre-installed!  
Call or visit [macmall.com](http://macmall.com) for details!

iPod® shuffle in five new colors!

- Holds up to 240 songs
- Amazingly small—only 1.07" tall

starting at **\$74<sup>94</sup>** (1GB) #7098940



iPod® nano

- 2GB model holds up to 500 songs
- 1.5" color LCD

starting at **\$142<sup>48</sup>** #7098953

iPod® with Video

- Now offers up to 80GB of storage
- Download and play cool games

starting at **\$234<sup>87</sup>**

#7098947

**FREE**  
Engraving  
(select models),  
FM Transmitter &  
Carrying Case!



30GB iPod U2  
Special Edition

- Holds up to 7,500 songs, up to 25,000 photos or up to 75 hours

only **\$268<sup>99</sup>** #7098945

**MacMall**

1-800-321-7532  
Visit us at [macmall.com](http://macmall.com)  
Source Code: MACWORLD



# Connect with all the products

## SOFTWARE



**Now Shipping!**

Adobe

Upgrades Start at **\$1389**  
#7534486

Bring Out the Master Designer in You

**New! Creative Suite® 3 Master Collection**

■ Produce content for virtually all media ■ Combines the best of CS3 Design Premium, Web Premium, and Production Premium



Upgrade Only **\$589**  
#7518275

Let Your Creative Juices Flow

**New! Creative Suite® 3 Design Premium**

■ Everything you need for print, Web, and mobile publishing ■ Includes InDesign CS3, Photoshop CS3 Extended, Illustrator CS3, Flash CS3 Pro, Dreamweaver CS3, Acrobat 8 Pro



Upgrade Only **\$494**  
#7519809

Break Web Boundaries

**New! Creative Suite® 3 Web Premium**

■ Create websites, applications, and mobile content with unprecedented interactivity ■ Includes Dreamweaver CS3, Illustrator CS3, Flash CS3 Pro, Photoshop CS3 Extended, Fireworks CS3, Acrobat 8 Pro, Contribute CS3



Upgrade Only **\$789**  
#7519868

Capture Your Audience

**New! Creative Suite® 3 Production Premium**

■ Wow any crowd with visually innovative film, Web, and mobile content ■ Includes After Effects Pro CS3, Premiere Pro CS3, Illustrator CS3, Flash CS3 Pro, Photoshop CS3, Soundbooth CS3, Encore CS3



Upgrade Only **\$344<sup>95</sup>**  
#7534970

Extended, Expanded, Empowered

**New! Photoshop Extended** is the must-have tool for film, video, and multimedia professionals and graphic web designers using 3D and motion.



## Mac Pro

The Fastest and Most Powerful Mac



Authorized Reseller

Mac Pro

with Dual-Core Intel® Xeon® Processors

- Two Dual-Core Intel® Xeon® Processors running at up to 3GHz ■ 16X double-layer SuperDrive ■ NVIDIA® GeForce® 7300 GT graphics (256MB) ■ Easily expandable internal storage up to 2TB ■ Open bay accommodates second optical drive ■ iSight camera



Monitor sold separately.

Mac Pros Start at

**\$2099**

Mac Pro 2GHz

- Two Dual-Core 2GHz Intel® Xeon® Processors
- 1GB RAM
- 160GB HD

**\$2099** #6317113

Mac Pro 2.66GHz

- Two Dual-Core 2.66GHz Intel® Xeon® Processors
- 1GB RAM
- 250GB HD

**\$2494** #6317076

Mac Pro 3GHz

- Two Dual-Core 3GHz Intel® Xeon® Processors
- 2GB RAM
- 500GB HD

**\$3294** #6317121

## PERIPHERALS



Videoconference-Ready

**New! 22" VX2255wmb Widescreen LCD Monitor with Webcam and Microphone**  
■ Integrated 1.3MP video camera ■ 1680 x 1050 max. resolution ■ 5 ms response time

Only **\$349<sup>95</sup>** #7554882

SONY



Imagine: Life in Hi-Def

**HDR-HC7 High Definition Handycam® Camcorder**

- 10X optical zoom ■ 3.2MP still shot ■ ClearVid CMOS Sensor ■ 2.7" wide LCD ■ SteadyShot® Image Stabilization and Super NightShot®

Only **\$1099** #7372608

EPSON®  
EXCEED YOUR VISION



Print on Paper, Print on Plastic

**Stylus Photo 1400**

- 5760 x 1440dpi ■ PictBridge compatible
- Print directly onto CDs and DVDs

Only **\$399<sup>95</sup>** #7414960

BUFFALO



Hard-Working Hard Drive

**1TB DriveStation Quattro™**

- Supports RAID 0, 1, and 5 plus automatic RAID rebuilding ■ Four high-speed hard drives
- Easy-to-use Mac OS X RAID Utility for changing RAID modes

Only **\$569** #7420032

800.800.3333

[www.macconnection.com/mw](http://www.macconnection.com/mw)



# you want, all in one place

## Faster Processor, Same Low Price

### MacBook

with Intel® Core™2 Duo Processor

- Up to 4MB shared L2 cache, 2.16GHz with 667MHz FSB
- Up to 2GB RAM
- Up to 160GB SATA HD
- Intel® Graphics Media Accelerator 950
- 8X slot-loading SuperDrive (DVD±RW DL)
- 13.3" display
- Mac OS X 10.4 Tiger and Front Row
- iSight camera



MacBooks Start at **\$1094**

## Intel at the Core

### MacBook Pro

with Intel® Core™2 Duo Processor

- Up to 4MB shared L2 cache, 2.33GHz with 667MHz FSB
- Up to 3GB RAM
- Up to 160GB SATA HD
- ATI Mobility Radeon X1600 with 256MB GDDR3 memory
- Up to 8X slot-loading SuperDrive (DVD±RW DL)
- New 17" display
- Mac OS X 10.4 Tiger
- iSight camera
- FireWire 800



MacBook Pros Start at **\$1994**

## Same Apple, New Chip—Twice as Fast!

### iMac

with Intel® Core™2 Duo Processor

- Up 4MB shared L2 cache, 2.33GHz, 667MHz FSB
- Up to 3GB RAM
- Up to 250GB SATA HD
- 17", 20", or 24" widescreen LCD
- ATI Radeon X1600 graphics with 128MB GDDR3 memory
- 8X slot-loading SuperDrive (DVD±RW DL)
- Built-in AirPort Extreme and Bluetooth 2.0 + EDR

iMacs Start at **\$994**



Authorized Reseller

## Rock Your World Your Way



### iPod shuffle

Wear up to 240 songs on your sleeve

Start at **\$74**



### iPod nano

Up to 2000 songs in five stylish colors

Start at **\$142<sup>99</sup>**



### iPod

Movies, music, photos, and TV shows to go

Start at **\$237<sup>99</sup>**

the right tools for the right brain™

**MacConnection®**  
A PC CONNECTION BRAND



## MEMORY UPGRADES

www.macsales.com/memory

### We have the right memory for your Mac®

OWC has memory for nearly every Mac including G3, G4, and G5!

Providing the Right  
Memory for Apple Computers  
since 1988

#### Cash Back!

OWC offers memory trade in rebates see [www.macsales.com](http://www.macsales.com) for details

All memory from OWC meets or exceeds Apple's specifications and is backed by a 30 day money-back guarantee and LIFETIME Advance Replacement Warranty.

Cash Back  
**REBATE!**  
Earn up to  
**\$250**

**OWC Mac Pro 8-core/  
Quad-core Memory**  
1GB, 2GB, 4GB Matched Sets for  
up to 32.0GB  
Mac Pro Upgrades from  
**\$80.62** per GB

**OWC Mac Pro 8-core/Quad-core Memory**  
Fully tested and certified to meet or exceed all Apple specifications for use in Mac Pro for a lifetime of performance. OWC Memory includes the use of actual Apple-Qualified Heat-Spreaders to ensure you can utilize these models with full confidence.

Up to  
**32GBs of Mac  
Pro memory!**

Detail of Apple-  
Qualified OWC heat  
spreaders for Mac Pro  
Quad Xeon

## EXTERNAL STORAGE SOLUTIONS (FIREWIRE, USB & eSATA)

www.macsales.com/storage

Performance Plug-and-Play FireWire 800/400, USB 2.0, & eSATA



**OWC Mercury Elite-AL Pro**  
'Quad Interface'  
FW400/FW400/USB2  
250GB to 1.0TB from  
**\$169.99**

**OWC Mercury Elite-AL Pro**  
Performance RAID Solutions  
320GB to 2.0TB from  
**\$249.99**

**OWC Neptune FW400**  
Up to 500GB from **\$92.99**  
250GB for **\$117.99**

**OWC Mercury On-The-Go**  
FireWire, FireWire+USB2,  
USB2, USB2+eSATA  
Solutions up to 250GB  
from **\$99.97**

**FREE  
Included  
Software!**

Macworld Macworld Photoshop User  
MacAddict  
MacHome  
EXTREME  
APPROVED

**Prosoft Engineering® Data Backup 3, NovaStor  
NovaBACKUP®, and Intech® SpeedTools Utilities™**  
...a \$200 Retail Value FREE! Included with all OWC Mercury,  
OWC Neptune, and NewerTech miniStack® solutions.

**PROSOFT** **intech** **NOVASTOR**

## Build your own drive FireWire/USB2/eSATA



**3.5" Single & Dual Kits  
from \$44.95**

**2.5" Portable Kits  
from \$29.95**

## HARD DRIVE UPGRADES

www.macsales.com/harddrive

**2.5" ATA**  
up to 160GB  
from **\$49.99**

**3.5" SATA**  
up to 1.0TB  
from **\$47.99**

**3.5" ATA**  
up to 1.0TB  
from **\$49.99**

**2.5" SATA**  
up to 250GB  
from **\$67.99**

**Hard Drive  
Controller Cards**  
from **\$17.99**

## USB 2.0 UNIVERSAL DRIVE ADAPTER



**Macworld**

**The Swiss Army Knife of  
Disk Connectivity**  
*Gives New Life to Old Drives!*  
Connect any 2.5", 3.5", 5.25" IDE and SATA  
device to your computer through your  
USB 2.0 port. Easily transfer files from  
computer or notebook, back up files, or  
store large file archives on hard drives.  
only **\$24.95**

Mercury Elite, Neptune, Mercury On-The-Go, Other World Computing and OWC logo are trademarks of Other World Computing. NuPower, TRAFFICjam, miniStack, NewerTech and NewerTech arrow logo are registered trademarks of Newer Technology, Inc. VIOBO+, Guardian MAXimus, and Newer Technology are trademarks of Newer Technology, Inc. Other marks may be the trademark or registered trademark properties of their respective owners. Although all reasonable efforts are made to ensure accuracy, OWC is not responsible for any omissions, errors, or misprints. iPod song cover art and corresponding album cover art courtesy of Cheap Trick.



## Memory for Apple's Intel® Macs

Upgrade Core Duo and Core 2 Duo iMacs, Mac minis, and MacBooks. Now up to 4.0GB Available!\*



**Featured!  
Intel Mac  
Memory**

- 1.0GB starting from \$47.99
- 2.0GB Upgrade Kit Now \$97.99
- 3.0GB Upgrade Kit\* Now \$159.99
- 4.0GB Upgrade Kit\*\* Now \$229.99\*\*

\*For all speed Core 2 Duo Equipped Models  
\*\*For 2.0GHz and 2.4GHz Core 2 Duo models

## LAPTOP AND IPOD BATTERIES

[www.macsales.com/newertech](http://www.macsales.com/newertech)

The highest capacity replacement batteries for PowerBook® & iBook® computers PERIOD! from \$99.95



iPod® Replacement Batteries from \$19.99

**newer technology**  
**NuPower**



Up to  
**62%**  
Higher Capacity\*\*

## iPOD ACCESSORIES

[www.macsales.com/ipod](http://www.macsales.com/ipod)

**Mod Your Pod**



**JAM**  
Out in Your  
CAR

Up to  
**80 hours**  
of music!

OWC carries a full line of iPod accessories including batteries, cases, headphones, speakers, and much more to help you get the most out of your iPod.

**TRAFFIC Jamz**  
FM Transmitter + iPod  
Charger. Enjoy your jamz  
on the road! Play your  
Apple iPod through your  
car stereo.  
Only \$34.95

**VIDEO+**  
Rechargeable battery pack,  
charging station and stand  
for the iPod Video. Get up  
to 16 hours of video or 80  
hours of music with a fully  
charged iPod and VIDEO+.  
Only \$49.99

## Guardian MAXimus

[www.macsales.com/storage](http://www.macsales.com/storage)

**NEW!**



"live activity"  
backup

**Guardian  
MAXimus**

- FireWire 800/400+USB 2.0 Hardware RAID-1 (Mirrored) Data Redundant Solution
  - Up to 1.0TB of storage capacity
  - Provides "live activity" backup of critical data
  - Plug n' Play simplicity on any Mac or PC
- Up to 1TB from \$319.99



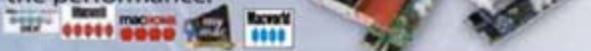
**newer technology**  
**miniStack v3**  
[www.macsales.com/storage](http://www.macsales.com/storage)

Now available with **NEW** 'Quad Interface' FW800/400, USB 2.0, eSATA **PLUS** up to 1.0TB of storage space from \$119.99!  
• 3-Port USB 2.0 and 2-Port FireWire® Hubs built-in. • Only 6.5" x 6.5" x 1.5"  
• Plug n' Play, ANY Mac or PC • Whisper Quiet Operation • Free Included Software

Award Winning: Macworld.com iF Red Dot

**POWER MAC G4  
PROCESSOR UPGRADES**  
[www.macsales.com/faster](http://www.macsales.com/faster)

Put a faster processor in your Mac for up to 18X the performance.



**SUPERDRIVES™**  
[www.macsales.com/superdrives](http://www.macsales.com/superdrives)

Internal SuperDrives for Desktops/Towers from \$39.99

Internal SuperDrives for Apple Laptops from \$69.99

External SuperDrives for all Macs from \$109.99

Read & Write  
DVD's & CD's



Includes the  
award-winning  
Prosoft Data  
Backup 3!



**Other World Computing**

Serving the Mac Universe since 1988

800.275.4576

[www.macsales.com](http://www.macsales.com)

**No Matter The Mac  
We've Got You covered!**

From 60x, G3, G4, G5 to Intel Desktops, Towers, Laptops, and All-In One OWC has the Goods to Maximize your Mac.





**Uplift your Mac.**

**mStand \$49.90 NEW**



**iLevel \$79.90**



**iLap from \$49.90**

[www.raindesigninc.com](http://www.raindesigninc.com) 1 800 797 7321



**biomorph** made to fit your lifestyle  
ergonomic desks

free catalog 888 302 DESK • order at [biomorph.com](http://biomorph.com)

**FastMac**  
Performance Upgrades

Up to 50 GB on 1 Disc in MacBook Pro

Call **866.416.FAST**  
or  
Visit [www.fastmac.com](http://www.fastmac.com)

<b>Batteries</b> iBooks • PowerBooks • MacBooks • Up to 68% More Capacity from <b>\$99</b>	<b>Processors</b> G3 • G4 • Pismo • iMac • Up to 1.8 GHz, 6x Faster from <b>\$99</b>	<b>iPod LCD Screens</b> Gen 3 • Gen 4 • Photo • Mini • Video • Nano • Up to 60% Brighter from <b>\$29</b>
---	---	--

**KBOX**  
BY KACE

**KBOX™ - Automate IT Mgt**

KBOX™ from KACE provides centralized management and provisioning of systems, applications, and files. Manage systems including: software/hardware inventory, software distribution, help desk, and alerts.

[www.kace.com/macworld](http://www.kace.com/macworld)

**DURABLE PROTECTION**  
for your laptop!

Our shells don't just look good...  
they offer solid protection  
for your investment!

**TECHSHELL**  
SCRATCH-FREE

Snap On Design  
Complete Protection  
Scratch Resistant  
Full access to all ports  
Lifetime Warranty

**25 Great Styles!**

[info@techshell.com](mailto:info@techshell.com)  
[www.techshell.com](http://www.techshell.com)

**850-476-6563**



ACME MADE  
TRADEMARK

The Slim Cargo



The Nano Clip

modern products  
for a modern  
lifestyle.

acmemade.com

 **Sidewinder™** Smart holster  
for iPhone®



**Innovation**  
Sidewinding  
retractable cord  
management  
system with  
Bluetooth headset  
storage.  
(Patent Pending)

**Versatility**

Multidapt® clip system,  
and removable 360°  
rotating clip which also  
works as a tabletop stand.



[www.MARWARE.com](http://www.MARWARE.com)

Go ahead,  
wake the neighbors!



**4 audioengine 5**  
[www.audioengineusa.com](http://www.audioengineusa.com)

Wireless Ready • Self-powered • Works with everything • (877)853-4447

©2006 Audioengine. Apple iPod®, Universal Dock® and dancing girls not included.



**Emergency Drive Copy**

**Granite**  
D•I•G•I•T•A•L



The tool every computer user must have. Copy, Backup, Duplicate, Recover, Repair, Restore, Archive, and Test any SATA or IDE Hard Drive. Make a duplicate copy of critical data without having to open up the computer.

**USB 2.0 to SATA/IDE Cable... \$24.95**

**Drive Shield Protection**



Protect any 2.5" and 3.5" hard drive mechanism. Slide in the drive and protect them from static electricity, short circuits, and impacts.

**Silicon Shields 2.5" & 3.5" Kit... \$9.95**

• granitedigital.com • 510-471-6442 •

Stretch It. Switch It. Split It. Gefen's Got It.

**Gefen**

**Any Apple Display or TV. Countless Possibilities.**



**HD Mate Scaler**

Play Games, Watch TV and Access Computers from your Apple Display or TV.

Upscale and switch your standard definition or high definition sources to resolutions up to 1920x1200 or 1080p.

**Features**

- Connects Three Video Sources (Two Component and One DVI/HDMI) to your Apple Display or TV
- Offers Digital TOSlink and Analog RCA Audio Support
- Switches Between Audio/Video Sources Within Seconds
- Scales Video Sources In All HD Resolutions up to 1080p

So You Get Vibrant HD Video, Regardless of Your Source.

**www.gefen.com**  
(800) 545-6900

**AT LONG LAST!**

An automated duplicator for your Mac.

Pico duplicator and MP3 ripper just **\$699**



Call 1-866-309-8627 or visit [www.discmakers.com/mw](http://www.discmakers.com/mw)

**DISC MAKERS™**

**iPodMiniMall.COM**

Get iPods, iPod Cases, iPod Speakers, iPod Headphones, And More..... All for Guaranteed Low prices.

**www.iPodMiniMall.com**



Only \$4.99 / Only \$8.99

**Make the most of your mouse rating in**

**Macworld**

Transform your great press into a valuable marketing tool.

Reprints, Eprints and NXTprints of your Macworld mouse rating allow you to place this positive press directly into the hands of your clients, prospects, employees, investors and recruits.

**RMS**  
REPRINT  
MANAGEMENT  
SERVICES

For more information contact RMS:  
800-290-5460 ext.100  
[macworld@reprintbuyer.com](mailto:macworld@reprintbuyer.com)  
[www.reprintbuyer.com](http://www.reprintbuyer.com)

**CardRaider**

- Recover lost digital photos!
- The easiest and most affordable picture rescue tool.
- Supports JPEG and most any RAW format.

**\$19.95**

**iGlasses**

- Expert control for your iSight.
- Brighten, color balance, effects, flip, rotate and more!

**\$8.00**

**iMage USB Webcam**

- Designed for Mac.
- Add video to any USB 2.0 Mac.
- Great for iChat, Skype and Yahoo!

**\$59.95**  
plus shipping



**ecamm network**  
dream the connection

**ecamm.com/camera**

unique products  
worldwide delivery  
satisfaction guarantee

**SEND AN EMAIL!**

**@**

**Macworld**

**SHOWCASE**

**niki\_stranz@macworld.com**

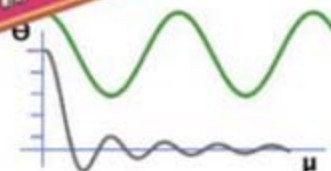
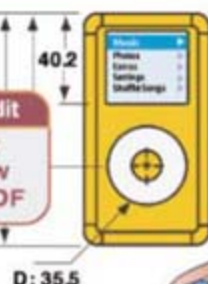


# EasyDraw®

Make Drawing Fun on OS X

- Technical Drawings
- Charts & Diagrams
- Web Graphics
- Text Layout
- Logos
- "This Advertisement"

Import & Edit  
MacDraw  
Claridraw  
PICT & PDF



New Version with Libraries  
Import Claridraw Libraries

<http://www.easydraw.com>



ph: 608.444.5245

fax: 608.635.2124

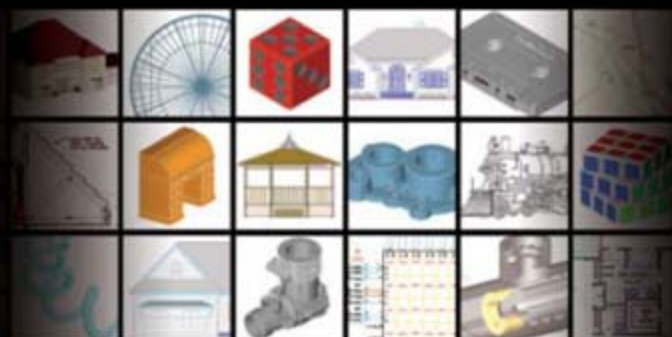
© 2007 EasyDraw, a Dekorra Optics LLC enterprise. All rights reserved. EasyDraw is a registered trademark of Dekorra Optics, LLC. Mac and Built for OS X are trademarks of Apple Computer, Inc.

IMST

Version 2

# TurboCAD® MAC PRO

Precision 2D Drafting & 3D Modeling



AutoCAD® & Adobe® Illustrator® Compatible  
Realistic 3D Rendering  
Intuitive. Powerful. Precise.

To order call: 1-800-833-8082 Use Promo Code: MacWorld06  
or visit: [www.turbocad.com/mw06](http://www.turbocad.com/mw06)

all new **iPhone** accessories

Call us for dealers near you 1.800.644.1132 or visit us at: [www.macally.com](http://www.macally.com)





# Where's Your Web Site?

## Original FatCow Web Hosting Plan

- 300 GB of Disk Space for Your Files
- 3,000 GB of Monthly Data Transfer
- Unlimited E-Mail Accounts
- Easy-to-Use Site Building Tools
- WordPress, phpBB, GBook Included
- ShopSite Online Store
- Friendly 24/7 Customer Support

only  
**\$8.25**  
a month\*

## FatCow Now Offers ...

### InstallCentral

Enhance your site with the latest applications available using this simple installation wizard.

### Exchange Hosting

Use Entourage to access, sync and share e-mail, schedules, contacts and tasks.

Udderly Fantastic Web Hosting for Creative Individuals

\* Monthly rate based on the annual fee of \$99, due at signup.

1.866.544.9343

Visit us today. [www.fatcow.com/macworld](http://www.fatcow.com/macworld)

- Time & Billing
- Contacts
- Mailing list
- Inventory
- Invoicing
- Purchasing
- HR



BIG Business software  
for the smaller business.

Designed for the PPC  
& Intel MACs

[www.softquik.com](http://www.softquik.com)

## Headspace Explorer™ relaxation software



Relax  
Re-energize  
Refresh

[www.flyingchao.com](http://www.flyingchao.com)

802.11*n* for  
all **PowerBooks!**



**QUICKERTEK™**  
BEFORE YOU CAN THINK IT

1.866.691.1585 sales  
[quickertek.com](http://quickertek.com) web  
1.316.691.1585 tech

3 point oh my GOD!



**MailTank 3.0**

visit [Mailtank.com](http://Mailtank.com) or call 877-622-8265 for **FREE trial**





# MacHighway™

SINCE 1997

Mac Powered Web Hosting for Mac Users,  
by Mac Users. Plans for as little as

**\*\$4.12 a month\***

[www.MacHighway.com](http://www.MacHighway.com) | Toll Free 1-800-604-9960

Get a free month when you sign up!

(use coupon code A7643)

Mac is a registered trademark of Apple Computer Inc. © Category 99, Inc. All rights reserved

**BIG POSTERS**  
AT HUGE DISCOUNTS

2-3 DAY TURNAROUND OTHER SIZES AND MEDIA AVAILABLE LAMINATION & MOUNTING AVAILABLE

24" x 36" \$25 NO MIN

17" x 22" ... \$12.50  
36" x 48" ... \$50  
48" x 72" ... \$125  
60" x 84" ... \$210

GLOSS, SATIN, MATTE FINISH

Learn more: Call or visit: **BIGPOSTERS.COM**  
ASK FOR A SAMPLE PACK TO SEE AND FEEL THE QUALITY!

Creative Juice Printing & Graphics - 96 Dicks Blvd - Farmingdale, NY 11735

**1-888-880-HUGE**

**EDG**  
REAL AMERICAN GRAPHICS

**5000 4x6 POSTCARDS \$119**

FULL COLOR DOUBLE SIDED ON THICK 14PT CARD STOCK  
\*price does not include network or shipping\*

**877.PICK.EDG**  
[www.edgmiami.com](http://www.edgmiami.com)

High-Performance Mac Memory



Lifetime Warranty

Same Day Shipping

**1-800-831-4569**

Mon-Fri 9am-6pm CST

Memory Upgrades

iMac Intel

512mb - \$39  
1Gig - \$59  
2Gig - \$118

MacBook

1Gig - \$69  
2Gig - \$118

Mac Pro

1Gig - \$149  
2Gig - \$199  
4Gig - \$395

MacBook Pro

1Gig - \$59  
2Gig - \$118

Mac mini Intel

1Gig - \$69  
2Gig - \$118

G5 DDR2

1Gig - \$75  
2Gig - \$118  
4Gig - \$275

Speak to a  
Memory Expert

Secure Online Ordering at

**WWW.RAMJET.COM**

1-800-831-4569

Professional, Fast, Dependable



# AmericasPrinter.com

The easiest way to print today.



"We use  
**AmericasPrinter.com**"

Presentation Folders \$629  
starting at only

TriFold Brochures \$179  
starting at only

Sales Sheets \$99  
starting at only

Letterhead \$129  
starting at only

Postcards \$79  
starting at only

Business Cards \$39  
starting at only

Catalogs \$339  
starting at only

Doorhangers \$179  
starting at only

OUR NEW STANDARD.  
**THICKEST**  
IN THE INDUSTRY  
**16pt**  
ON ALL HEAVY PAPER PRODUCTS

**MIX'N'MATCH  
GLOSS UV  
COATING**

FRONT BACK  
☐ NO UV ☐ NO UV  
☐ FLOOD UV ☐ FLOOD UV  
☐ SPOT UV ☐ SPOT UV

All full color offset Printing. All premium stock paper.

- **FREE Sample Kit!**
- 2,000+ products in our Price Guide
- Great Pricing with Fast Turnaround
- 15,000+ Customers Nationwide
- Full Commercial Heidelberg Printshop
- Print & Ship Anywhere in the USA

We Accept



Preferred Shipping Carriers



**800.552.1303** toll free

714.521.1100 CA | 714.521.5650 fax

6910 Aragon Circle, Buena Park, CA 90620

[www.AmericasPrinter.com](http://www.AmericasPrinter.com)







## Mobile Electronics Repairs & Upgrades

Overnight - Nationwide

- Local Pickup & Delivery
- Fast Friendly Service



1-888-64-RESTORE

(1-888-647-3786)

8am - 5pm PST M - F

[techrestore.com](http://techrestore.com)



### Mac Laptop Restore

Overnight Service  
Only **\$79**

Overnight LCD  
Repairs From **\$329**

Overnight 8x Dual Layer  
Superdrive Upgrades **\$229**

**New!** Overnight HD Upgrades  
160GB 7200RPM For  
MacBook/Pro **\$349**



### iPod Restore

Overnight Service  
Only **\$29**

iPod Battery  
Upgrades **\$19**

iPod Screen  
Repairs from **\$59**

Second Generation  
iPod nano Sale  
Up to 8GB from **\$99**



### Data Restore

Overnight Service  
Only **\$49**



Apple TV Upgrades  
Up To 160GB From **\$99**



### PSP Restore

Overnight Service  
Only **\$29**

**Shop** for Mac Laptops,  
iPods, Apple TVs & Mobile  
Electronics Accessories

**Tech e-store**

## DATA RECOVERY: 800-440-1904

7 great reasons to choose DriveSavers:



- Fast, advanced, proprietary techniques.
- Recommended by all computer and hard drive manufacturers.
- All operating systems; Mac, Windows, OS/2, Netware and UNIX.
- All storage devices including flash memory, MP3 players, SAN, RAID and NAS systems.
- Instantly retrieve recovered data with DataExpress™.
- Government Contracts and High Security Service.
- Featured in MacWorld, MacAddict, Forbes, CNN, BBC, New York Times, Popular Mechanics and more.



[www.drivesavers.com](http://www.drivesavers.com)

**"We Can Save It!"**

Visit DriveSavers at [www.drivesavers.com](http://www.drivesavers.com)

©2005 DRIVESAVERS, INC. 400 BEL MARIN KEYS BLVD., NOVATO, CA 94949 INTL: 415-382-2000

### Why Choose ESS Data Recovery?

- Superior, 24/7 Service
- Confidentiality Guaranteed
- Affordable, Up-front Pricing (no hidden charges)
- High Recovery Success
- Class-100 Clean Room Lab Standards
- Patent-Pending Recovery Technology
- Free Drive Included for Data Return

## ESS DATA RECOVERY LABS

# 800.237.4200

[www.savemyfiles.com](http://www.savemyfiles.com)





Please visit <http://booklets.4over.com/nextday>

## 4OVER IS THE FIRST PRINTER IN THE NATION TO OFFER **NEXT DAY BOOKLETS.**

Give us all the information we need by 9am (PT), and your Booklets will be printed and ready the Next Day. Booklets up to 32 pages are available in lots of 1000, 2500, 5000, your choice.

### DOES YOUR TRADE PRINTER OFFER THIS?

\*Precise file preparation is required to ensure your booklets are done by the next business day (Monday through Friday). Next day booklets are only available in 8, 12, 16, or 32 pages. The following 5 terms must be met to ensure all booklets are delivered the next day: (1) All orders and files must be uploaded by 9am (PT) Monday through Friday. (2) Files must be delivered in single pages or printer's spread, and must be done using the 4over templates provided online. (3) Files must include 0.125" bleed, fonts converted to outlines, and 300 dpi. (4) Individual files must be properly labeled: "cover", "back cover", "page 1", "page 2", etc. (5) For best results, we prefer files in a PDF format. Customers may send .eps, .tiff, .ai, or .jpg. All QuarkXpress and InDesign files must be exported as PDF. Please visit <http://booklets.4over.com/nextday> or email [nextdaybooklets@4over.com](mailto:nextdaybooklets@4over.com)








**WHOLESALE**  
 printing direct .com  
 www.wholesaleprintingdirect.com

premier online **wholesale** supplier  
of high quality **printing**

**"There's no question why you're  
my printer of choice."**

— Mary Miller | Marketing Manager  
Fortune 500 Company

- Instant Pricing • Personalized Account Management
- Exceptional Offset Printing Quality • Wholesale Prices

**Visit us online today!**  
**SAVE 20%**  
 To learn how to save an additional 20% off your first order, please visit  
[www.wholesaleprintingdirect.com/macworld.php](http://www.wholesaleprintingdirect.com/macworld.php)

**www.wholesaleprintingdirect.com**  
 Call us (Toll Free) at 1-866-298-8586 to find out more!

# sharpdots.com

**Your Online Resource For All Your Printing Needs**

MACWORLD SUBSCRIBER  
**PROMOTION**



**RAPIDOTS  
FLYERS**

5K 4/4 **\$229**  
 10K 4/4 **\$409**

8.5x11 Flyers with Aqueous Coating  
 100# Book C2S Gloss Stock  
 Additional flyer products  
 available online.

Offer expires August 31, 2007

Enter coupon code: 08FLY07 for discount

Quantity	Turnaround	Product	Price
1000	4/4	Business cards	\$40
1000	4/4	4x6 Postcards	\$65
1000	4/0	Bookmarks	\$70
1000	4/1	5x7 Postcards	\$86
1000	4/4	5.5x8.5 Postcards	\$109

Go to [www.sharpdots.com](http://www.sharpdots.com) or call 877.742.7789

See website for complete details. All products printed from press ready digital artwork. Prices subject to change without notice.

# ZOO PRINTING

**NEW  
TRADE  
PRICES!**

**Photo Quality  
Printing**  
 Staccato 20  
 Equivalent to 450 line screen

10395 Jefferson Blvd • Culver City, Calif. 90232

	1,000	2,500	5,000	10,000
<b>FLYERS</b>				
8.5" x 11" 100# Gloss Book 4/0	\$95	\$175	\$225	\$420
Two sided Aqueous Coating 4/4	\$195	\$250	\$295	\$465
<b>BROCHURES</b>				
11" x 17" 100# Gloss Book 4/0	\$190	\$350	\$450	\$695
Two sided Aqueous Coating 4/4	\$390	\$495	\$595	\$850
<b>POSTCARDS AQ</b>				
4.25" x 6" 14 pt. C2S 4/4	\$75	\$125	\$145	\$275
Front sided Aqueous Coating				
5.5" x 8.5" 14 pt. C2S 4/4	\$99	\$150	\$199	\$429
Front sided Aqueous Coating				
6" x 9" 14 pt. C2S 4/4	\$129	\$167	\$276	\$541
Front sided Aqueous Coating				
<b>BUSINESS CARDS</b>				
14pt C2S Two sided UV Coating 4/0	\$25	\$39	\$55	\$110
Photo Quality 350 Line Screen 4/4	\$25	\$39	\$55	\$110

This website is for **TRADE ONLY!**  
 All Trade Customers Must Qualify to Receive These Prices!  
 All prices listed are for standard 5 day turnaround. 3 day prices and custom quotes are also available.  
 For more information visit our website.  
 We reserve the right to change prices without prior notification.

**WWW.ZOOPRINTINGTRADE.COM**  
**310.253.7751**



# MEMORY!

**ALL MEMORY ON SALE!** **LIFETIME WARRANTY**

667 MHz DDR2 ECC for Mac Pro 4gb Kit 2x2gb • 2gb Kit 2x1gb  
 5300/667 - All Intel Macs 1gb 667 SoDIMM  
 4200/533 For DualCore G5 4gb Kit 2x2gb • 2gb Kit 2x1gb  
 4200/533 Powerbook G4 Hi-Res 1gb 533  
 3200/400 For Dual Processor G5 2gb Kit 2x1gb • 1gb Kit 2x512mb  
 2700/333 Powerbook G4 1gb 533 — PowerMac G4 PC133 256mb • 512mb

Click for Best Prices on New Memory, Drives & Accessories!



**800-873-3726**

11833 Wilshire Boulevard, West LA, CA 90025  
 Phone: (310) 814-3200 Fax: (310) 960-4433

**MacSolutions.com**

## Mac® Prices

[www.pcprices.net](http://www.pcprices.net)



- Exclusive Mac price trackers
- Prices updated daily
- New and clearance models
- Macs, iPods, Displays, & more

Compare at a glance...  
 prices, bundles, & availability  
 from major Apple resellers



## Turn your computer clutter into cold cash!

**WE BUY** Apple Macintosh and other brand name laptops, desktops and servers. We buy from businesses, institutions and individuals. One unit or a thousand, working or not, contact us for a quote. **AND...**

**WE SELL** fully refurbished Apple Macintosh computers, providing you with a new computer experience at a used computer price.

Call us today **(800) 960-1140**

**MicroReplay**

[www.microreplay.com](http://www.microreplay.com)

MicroReplay, Inc. 309 Walnut Street, Wellesley, MA 02481 - (781) 237-1140

STUDENTS · EDUCATORS · SCHOOLS

**journeyEd**

1.800.874.9001

.com



**SAVE up to 85% • Thousands of Products**

**Get Ready  
for Back-2-School!**  
**Students save BIG  
on software!**



**NEW!**

**Adobe  
Creative Suite 3  
Design Premium**

SRP \$1799

**CLICK!**



**NEW!**

**MindJet  
MindManager 7**

SRP \$229

**\$99<sup>98</sup>**

Save \$129



**Finale  
2007**

SRP \$600

**\$279<sup>98</sup>**

Save \$320



**Final Draft  
Final Draft 7**

SRP \$299

**\$149<sup>98</sup>**

Save \$140



**Toon Boom  
Studio 3.5**

SRP \$399

**\$139<sup>98</sup>**

Save \$260



**Quark  
QuarkXPress 7  
with 1GB USB 2.0  
Flash Drive**

SRP \$799

**\$199<sup>98</sup>**

Save \$590



**Alias  
Maya 8.5  
Bundle**

SRP \$6589

**\$374<sup>98</sup>**

Save \$6215



**Corel  
Painter X**

SRP \$429

**\$99<sup>98</sup>**

Save \$330



**Total Training  
Adobe Photoshop  
CS3 Extended**

SRP \$99

**\$64<sup>98</sup>**

Save \$35



**NeverLate  
7-Day Alarm  
Clock**

**\$24<sup>98</sup>**



**iPod  
Stereo Bathroom  
Dock**

**\$79<sup>98</sup>**

**www.JourneyEd.com**

Priority Code: MW



**Students & Teachers****Academic Discounts For You!**

Prices may be subject to change.

<b>Sibelius®</b>	
Sibelius 4.....	\$229
<b>MakeMusic®</b>	
Finale 2007.....	\$239
<b>Propellerheads®</b>	
Reason 3.0.....	\$199
<b>Native Instruments®</b>	
Kontakt 2.....	\$179
Guitar Rig 2.....	\$449
Reaktor 5.....	\$199

<b>Adobe®</b>	
Acrobat Pro 8.....	Save 67%
Photoshop CS3 Ext.....	Save 71%
InDesign CS3.....	Save 73%
Flash CS3 Pro.....	Save 66%
<b>Total Training®</b>	
Acrobat 8 Pro Training.....	\$89
Photoshop CS2 Training.....	\$99
Creative Suite 2.3 Training.....	\$399
<b>Microsoft®</b>	
Office 2004 Student/Teacher.....	\$144

**Hey Parents!**

You are eligible to buy for all your students at home or away.

**FREE Shipping!**

...on ALL your online orders!

**"Shop from over 10,000 products in stock today!"****K-12 to College!****Save Up To 85%**

source code A154

**ACADEMIC SUPERSTORE™****1-800-218-7455****MW.AcademicSuperstore.com****Mac of All Trades**

Your Solution for Buying and Selling Used Macs

**www.macofalltrades.com****800-227-3971**  
1200 Marshall St., Shreveport, LA 71101We buy,  
sell, and  
horse-trade  
**Macintosh****ShreveSystems.com****WWW.MEMORY SOLUTIONS.COM**

We've got all the memory solutions you need for:

**800-462-7160**Mac Pro® • MacBook Pro® • MacBook® • Power Mac®  
PowerBook® • iMac® • iBook® • eMac® • Mac Mini®

Samsung memory available

2gb 667MHz DDR2 ECC FB-DIMM* for Mac Pro	\$229
1gb 667MHz DDR2 ECC FB-DIMM* for Mac Pro	99
1gb 5300-667 for MacBookPro/Intel Macs	39
1gb 4200-533 for Dual Core G5	39
1gb 3200-400 for Dual Processor G5	69
1gb 2700-333 for PowerBook G4/iBook G4	99

\* FB = Fully Buffered

**You need 'em?****We've got 'em!****SeafoodByNet.com**

Fresh from the sea to your doorstep!

Join our free  
Fresh Club Newsletter  
for daily fresh deals!

Visit

[www.SeafoodByNet.com](http://www.SeafoodByNet.com)  
or call 815-337-4028

Your store for restaurant quality seafood and meats.



# POWER MAX

Call the Mac Experts  
**800-613-2072**

Local: 503-624-1927  
fax: 503-624-1635  
email: [sales@powermax.com](mailto:sales@powermax.com)  
Apple Specialist

PowerMax  
Leopard T-Shirts  
only \$19.99!



## Speed to Spare: Faster MacBook Pros

The latest MacBook Pros have been upgraded with up to a 2.4GHz Intel Core 2 Duo processor and NVIDIA GeForce 8600M GT graphics card. The 17-inch model is available with an optional high resolution display.

**PRICES START AT \$1999. CALL TODAY!**

*Get double your money back on shipping, MP3 sunglasses, a \$75 RAM rebate and more with any new Mac!*

### MAC MINI



Don't let its small size fool you -- the Mac mini is fast! We have various configurations and price points available.

### MAC PRO



Now with the new 8-core 'Clovertown' processors, the Mac Pro is the world's fastest, most expandable Mac ever!

### MACBOOK



Portable, practical and powerful: the new MacBooks are faster than ever. Now with speeds up to 2.18GHz, the MacBook is tough to beat.

### INTEL IMAC



Apple's latest iMac is thinner, brighter and faster than ever. We carry every iMac make and model available.

## We Take Trade Ins!

Trade in your current Mac or iPod and get credit toward your next purchase -- only at PowerMax!



## Microsoft Vista

We'll install it for you! Purchase Microsoft's new Vista OS from PowerMax and we'll install it on your new Mac. Prices start at \$149.88.



## \$75 RAM REBATE AND DOUBLE YOUR MONEY BACK ON SHIPPING WITH A NEW MAC\*

### CERTIFIED PRE-OWNED



Pre-Owned G5 Power Macs and iMacs are in stock! All bench-tested & with a 90-day warranty.

### APPLE IPODS



New iPod shuffle colors available at PowerMax! Choose from pink, blue, green, silver and orange!

### HARD DRIVES & STORAGE



PowerMax has all your storage needs. From internal drives to RAIDS, we carry all major brands.

CRT iMac G3/600MHz	
256MB RAM/40GB HD/CD-RW	\$349 <sup>00</sup>
eMac G4/700MHz Dual Boot	
512MB RAM/40GB HD/Combo drive	\$479 <sup>00</sup>
iBook G4/800MHz 12-inch screen	
640MB RAM/60GB HD/Combo Drive	\$729 <sup>00</sup>
iMac G5/1.8GHz 20-inch screen	
1204MB RAM/250GB HD/SuperDr	\$1339 <sup>00</sup>
G5/2.0GHz Power Mac	
512MB RAM/160GB HD/SuperDrive	\$1669 <sup>00</sup>

iPod shuffle dock	\$29 <sup>00</sup>
iPod shuffle 1GB multiple colors!	\$78 <sup>88</sup>
iPod nano 2GB silver	\$149 <sup>00</sup>
iPod nano 4GB slvr, pink, gm, blue	\$194 <sup>88</sup>
iPod nano 8GB black	\$244 <sup>88</sup>
iPod 30GB black or white	\$244 <sup>88</sup>
iPod 80GB black	\$334 <sup>88</sup>
iPod 80GB white	\$338 <sup>88</sup>
Used iPods	Starting at \$99 <sup>00</sup>

LaCie 160GB Mini FireWire 2MB	
7200 RPM factory refurbished	\$69 <sup>88</sup>
Fantom Titanium II 250GB 7200RPM	
USB 2.0 8MB cache	\$99 <sup>88</sup>
EZQuest Monsoon 250GB	
7200RPM FW 400 USB 2.0	\$114 <sup>88</sup>
EZQuest Slim 120GB 5400RPM	
FW 400 USB 2.0	\$134 <sup>88</sup>
CalDigit 500GB SATA 3G FireWire VR	
16mb/7200RPM module	\$339 <sup>88</sup>

## HOT DEALS



See Eye 2 Eye  
True eye contact for webcams  
**JUST \$49.99**



Agent 18 VideoShield  
Protection for your iPod Video  
**JUST \$27.88**



ATI  
Radeon  
9600 AGP  
Edition  
For Mac  
and PC!  
**JUST \$199.88**



Elgato  
Eye TV  
250  
Digital TV  
recorder  
**JUST \$178.88**



Sonnet SG4-  
1800  
Encore  
ST G4  
1.8GHz  
upgrade  
**JUST \$289.88**

## Visit the PowerMax Outlet Store!

Great low-dough deals on your favorite products



## Save Money...

Subscribe to The Bolt!  
Our online newsletter dedicated to the Apple enthusiast



## We're Located in Oregon!

The land of friendly people, trees, high-tech & No Sales Tax!



## Finance Your Next Mac!

Get 90-days same-as-cash financing on your next Mac purchase! order -- apply today!



Prices subject to change without notice. Credit card orders strictly verified against fraudulent use. With use of credit card as payment, customer acknowledges that some products are subject to final sale. Many prices are limited to stock on hand. All brand names are registered trademarks of their respective holders. Not responsible for typographical errors. \*after mail-in rebate(s). Some restrictions apply. Mac mini not valid for \$75 RAM rebate.



# A Day without Steve

Someday, Steve Jobs will have to step down. What then?

**O**ne sure way to dampen the spirits of a Mac enthusiast is to start talking about Apple without Steve Jobs at the helm.

A decade after Jobs's return to the company he founded, the bad old days of the "beleaguered" Apple Computer Inc. have mercifully faded into memory. Apple today seems as strong as it has ever been, with hit products, steady profits, and money in the bank. Clearly, Steve Jobs is not just the hero of Apple's recovery. He is the corporeal manifestation of the resurgent Apple—past, present, and future.

But Jobs's battle with cancer a few years ago and the more recent options-backdating scandal have forced Apple followers everywhere to consider some uncomfortable possibilities. There's also the more prosaic possibility of his retirement.

Lest you think that Jobs would never willingly leave his role at Apple, consider the case of Bill Gates, another leader who is strongly identified with the company he founded. Yet today, he is slowly relinquishing his leadership role at Microsoft. If Bill can learn to let go, then so can Steve.

## Steve's Superpowers

Whatever its cause, what might Jobs's departure mean for Apple?

Steve's best-known talent is his ability to charm and persuade. The widely held belief is that his Reality Distortion Field (RDF) is a superpowerful form of salesmanship, which Jobs can use to convince anyone of anything.

Nothing could be further from the truth. In fact, if there's one thing Steve Jobs cannot do, it's lie convincingly about what he thinks of a technology product. Witness the disdain he displayed at the introduction of the Motorola Rokr cell phone two years ago. His disgust was transparent when he seemed to be unable to make the phone work correctly during the demonstration.

Steve's persuasiveness stems entirely

from his own personal certainty. You begin to believe that the new iPhone is the greatest communication device ever created because Steve believes it. Conversely, if he doesn't believe it, you don't feel it.

This transparency may seem like a crippling liability, but it's actually a strength. What makes a Steve Jobs keynote so compelling is the fact that his opinions translate directly into Apple's policies and products.

Obviously, one person can't control every detail of every product, but Jobs has proven time and again his willingness to reach all the way down the organizational chart and make decisions about even the smallest features. His readiness to exert control over anything makes the idea that he controls everything seem reasonable. The coincidence between what Apple produces and what Steve Jobs can convincingly speak about reinforces the RDF legend.

**Steve's persuasiveness stems entirely from his own personal certainty.**



## What Would Steve Do?

Many of the things that make Jobs a captivating public face for Apple also make him an effective leader within Apple. His tendency to micromanage can more charitably be viewed as a refreshing willingness to cut through bureaucracy. Few "insanely great" products are created by committees, after all.

And if one person must make all the final decisions, Jobs is an excellent choice. He may not always be right, but his batting average is pretty darned good. And when he does foul one off (as with the design of the original flat-screen iMac) or strike out entirely (the G4 Cube), he moves on immediately. He may be remembered for his hits, but his failures have been equally responsible for honing his instincts.

Contemplating a Jobs-less Apple, it's hard to imagine that anyone could play the same role in the company that Jobs does now. Though promoting from within seems the obvious choice, it may not be possible to find a replacement for Steve Jobs inside Apple. Autocratic rule tends to breed weak middle management. Current Apple executives often seem motivated by fear of Jobs rather than by their own intrinsic factors. Even worse would be someone who emulated Jobs's despotism without his accompanying good instincts.

The only effective transition strategy may be to retain Jobs in spirit while converting the organization to a more democratic structure. Let the management mantra be "What Would Steve Do?" Above all, Jobs has always wanted to make the best products possible. To paraphrase Socrates: Virtue does not come from market share; rather, from virtue comes market share and all other good things. Steve Jobs may never be equaled by another single person, but he may be bettered by an entire organization that stays true to his ideals. ✕

**John Siracusa** is a columnist for Ars Technica ([arstechnica.com](http://arstechnica.com)).





## We're not shy...

about exposing the quality that's hidden underneath our stylish exteriors. From the inside out, OWC storage solutions are dressed for success and you'll find our latest, capacity leading solutions built with the cutting edge from Hitachi. The best performing and reliable mechanisms go into every OWC Storage solution, and that's something no one needs to be shy about!



**OWC Mercury Elite™-AL Pro 1.0TB** Quad Interface FireWire® 800/400, USB 2.0, & eSATA Plug and Play solutions

**OWC Mercury Elite-AL Pro 2.0TB** FireWire 800/400+USB 2.0 Performance RAID Plug and Play solutions

**NewerTech® Guardian MAXimus™ 1.0TB** FireWire 800/400+USB 2.0 RAID-1 'Live Backup' Performance Plug and Play solutions

**OWC Mercury On-The-Go™**  
Bus Powered FireWire 800/400+USB 2.0 Plug and Play solutions featuring Hitachi performance drives up to 200GB at 7200RPM (Models up to 250GB offered).

**NEW!**  
**OWC Elite SOHO RAID**  
FireWire 800/400+USB 2.0 1U Rack-Mount Solutions up to 4.0TB.

**Up to 4.0TB** Internal Storage for Mac® Pro Quad and 8-Way Xeon Towers.

**Other World Computing**

Visit [www.macsales.com/storage](http://www.macsales.com/storage) or [newer.com](http://www.newer.com) call (800)275-4576

Mercury Elite, Mercury On-the-Go, Other World Computing and OWC logo are trademarks of Other World Computing. NewerTech and NewerTech arrow logo are registered trademarks of Newer Technology, Inc. Guardian MAXimus and Newer Technology are trademarks of Newer Technology, Inc. Other marks may be the trademark or registered trademark properties of their respective owners. Although all reasonable efforts are made to ensure accuracy, OWC is not responsible for any misprints, errors, or omissions.



Guardian **MAXimus™**

# Hardcore Data Protection



FireWire



FireWire 800/400+USB2

With its hardware RAID-1 (mirrored) data redundancy, *Guardian MAXimus* is like "live activity" backup while you work. It's always guarding against data loss – and costly system downtime – by writing the same information to two separate drives for a "mirrored" copy.

And with up to 1.0TB of storage capacity, data transfers rates up to 100MB per second, FireWire and USB ports, and a shock resistant design, *Guardian MAXimus* is built to deliver hardcore performance in any setting.

- If drive fails...No loss of data.
- You keep working and saving data. Replacement of failed drive enables automatic recreation of complete "drive mirror" to new drive.
- Quick, easy, affordable, permanent solution.

Included Software  
Prosoft Engineering® Data Backup 3, NovaStor NovaBACKUP®, and  
Intech® SpeedTools Utilities™  
...a \$200 Retail Value FREE!

PROSOFT

NOVASTOR

intech



Computer



Guardian **MAXimus**

Disk 1 "Primary"

Daily SALES
Daily Inventory Entries
Payroll
Current Projects

Disk 2 "Shadow"

Daily SALES
Daily Inventory Entries
Payroll
Current Projects



"This is a handy tool"



## The Swiss Army Knife of Disk Connectivity

**USB2 Universal Drive Adapter** Gives New Life to Old Drives!

Connect any 2.5", 3.5", 5.25" IDE and SATA device to your computer through your USB 2.0 port. Easily transfer files from computer or notebook, back up files, or store large file archives on hard drives. only \$24.95



Plug 'n' Play with any Mac (or PC)

**newer technology**  
Visit: [www.newertech.com](http://www.newertech.com) or Call: 815.308.7001

NewerTech and NewerTech logo are registered trademarks and the Newer Technology, Inc. logo and Guardian MAXimus logo are trademarks of Newer Technology, Inc. Other marks may be the trademark or registered trademark property of their owners. Prices, specifications, and availability are subject to change without notice.

To purchase NewerTech products, visit distributor:

**Other World Computing**

at [www.macsales.com](http://www.macsales.com) or (800)275-4576